



THE THIRD ANNUAL  
UNDERGRADUATE RESEARCH  
AND CREATIVITY SYMPOSIUM

"One of the most exciting developments on our campus is the creation of the Undergraduate Research Symposium. Not only does it feature collaborative work between our students and faculty, but it also sets the stage for a lifetime of intellectual pursuit."

– Dr. Ben E. Hancock, Jr.  
*President, Methodist University*

"I am pleased that Methodist's Center for Undergraduate Research and Creativity encourages students and faculty to collaborate on research and creative endeavors. Faculty enjoy mentoring their students, helping students prepare for graduate school and successful careers."

– Dr. Delmas S. Crisp, Jr.  
*Executive Vice President*

## **MISSION STATEMENT OF THE METHODIST UNIVERSITY CENTER FOR UNDERGRADUATE RESEARCH AND CREATIVITY**

The mission of the Methodist University Center for Undergraduate Research and Creativity is to establish educational opportunities that are collaborative and inquiry-based with the intention that every Methodist University student has access to exploratory learning across the curriculum.

METHODIST UNIVERSITY



# JOURNEY



# THE THIRD ANNUAL METHODIST UNIVERSITY UNDERGRADUATE RESEARCH AND CREATIVITY SYMPOSIUM

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## DR. BRIAN SOUTHWELL

### 2014 Keynote Speaker

Dr. Brian Southwell (Ph.D.), University of Pennsylvania studies the interaction among information environments, public understanding, and human behavior. In recent years, he has been invited to lecture on consumer understanding and information engagement by a variety of organizations in the United States, such as the National Academies of Science, the U.S. Agency for International Development, the American Cancer Society, the U.S. Food and Drug Administration (FDA), Public Radio International, Cornell University, and Harvard University. He also has offered a number of international lectures at institutions, such as the University Rovira i Virgili (Spain) and Qatar University.

Dr. Southwell currently is director of the Science in the Public Sphere Program in the Center for Communication Science at RTI International. In addition, Southwell is an adjunct professor with Duke University's Energy Initiative. He also is a research professor of Mass Communication and adjunct associate professor of Health Behavior at the University of North Carolina at Chapel Hill. Before moving to North Carolina, he served for almost a decade at the University of Minnesota, most recently as associate professor and director of Graduate Studies in the School of Journalism and Mass Communication, with an adjunct appointment in Public Health. In addition, Dr. Southwell has worked for various nonprofit and government organizations, including the Centers for Disease Control and Prevention (CDC) and Ogilvy Public Relations. His large-scale evaluation work has spanned a number of behaviors and audiences, including assessment of federal agency mass media campaigns, projects to improve local television news coverage of complex subjects, and various state-level social service campaigns. At RTI, Southwell has helped to develop a national survey of consumer energy perceptions, led projects for the FDA on consumer information processing, and advised numerous national evaluation efforts.

Dr. Southwell's research and theoretical contributions appear in more than 70 journal articles and chapters, in publications such as *Communication Theory*, *Communication Research*, *Journal of Communication*, and *Social Science and Medicine*. In 2013, Johns Hopkins University Press published a book by Southwell entitled *Social Networks and Popular Understanding of Science and Health: Sharing Disparities*. He served as senior editor for *Health Communication* from 2009 until January 2014 and is a member of the editorial board of *Public Opinion Quarterly* and eight other editorial boards. He co-edited a special issue of *Communication Theory* in 2009 on conversations and campaigns. His 2002 dissertation on multilevel modeling to predict learning from television advertising was acknowledged as a Dissertation of the Year by both the International Communication Association and the National Communication Association. In 2006, he was awarded the Arthur "Red" Motley Exemplary Teaching Award by the College of Liberal Arts at the University of Minnesota. In 2011, he won RTI International's President's Award. In 2012, the National Communication Association recognized him with a Distinguished Article Award for the scholarly impact of a 2007 paper co-authored with Marco Yzer.

Southwell currently lives in Chapel Hill, N.C.

## WEEK AGENDA

### MONDAY | APRIL 14

11:00 a.m. – Noon | Faculty Presentations (Locations Vary)  
7:00 – 9:00 p.m. | Graduate Research Symposium  
PA Auditorium

### TUESDAY | APRIL 15

7:00 – 9:00 p.m. | Creative Writing Exhibition  
PA Auditorium

### WEDNESDAY | APRIL 16

8:30 a.m. – 5:00 p.m. | Symposium Day (Locations Vary)

## SYMPOSIUM AGENDA

TIME	EVENT	LOCATION
8:30 – 9:00 a.m.	Opening Reception	Reeves Fine Arts Building Lobby
9:00 – 11:00 a.m.	Morning Session	Various
11:00 – 11:45 a.m.	Chapel	Hensdale Chapel
Noon – 1:00 p.m.	Lunch	On your own
1:00 – 2:00 p.m.	Dr. Brian Southwell, Keynote Speaker	Huff Concert Hall
2:10 – 3:10 p.m.	Afternoon Session & Poster Session*	Various
3:30 – 5:00 p.m.	Award Ceremony	Huff Concert Hall

\*Posters will be displayed in upstairs Berns beginning at 9:00 a.m. Students will be available between 2:00 and 3:00 p.m.

# PRESENTATION SCHEDULE

## MORNING SESSION

### Psychology

9:00 a.m.	Julius Toney, Julissa Corona Chepiernaél Cruz-Rodriguez
9:25 a.m.	Lory “Dan” Neishe, Emily Jones Ondrea Noddin
9:50 a.m.	Nabanita Choudhury Shereece Saxton, Crysta Carson
10:15 a.m.	Kevin Johnson, Megan Hesson
10:40 a.m.	Lory “Dan” Neishe, Julius Toney Cindy Mendez Segovia David Cleveringa, Chelsea Smith Brittany Wiggs, Lindsay Stinson

### International Relations | Religion

9:00 a.m.	Gina Martinez
9:25 a.m.	Grizel Bello
9:50 a.m.	Iuliia Melnikova
10:15 a.m.	Lois Hammond
10:40 a.m.	Jamie Mulkern

### Biology | Math | Geology

9:00 a.m.	Erin Fegley
9:25 a.m.	Amar Idrizovic
9:50 a.m.	Samantha Scoggins
10:15 a.m.	Nicole Cole
10:40 a.m.	David Nolan

### English

9:25 a.m.	Jamie Mulkern
9:50 a.m.	Emily Guidry
10:15 a.m.	Emory Jacobs

### Alumni Dining Room

The Role of Extracurricular Group Membership for Military Affiliated and Non-military Affiliated Students in Adapting to College
Authoritarian versus Authoritative Methods of Alcohol Use Intervention with College Students
A Neuropsychological Investigation of the Impact of Color on the Perception and Recall of Figural Drawings
Dichotic Listening in Relation to Handedness and Brain Lateralization
Textsperimenting: A Norms-based Intervention for Binge Drinking

### Reeves Fine Arts Building G5

Economics of Human Trafficking in Central America
How New World Treasure Led to Spain’s Financial Crisis
Positive Outcomes in Sochi – the Host City of the Winter Olympic Games in Russia
Income Inequality within Nations
Origins of Human Religiosity: A Materialistic Perspective on Eastern Religions

### Hendricks Science Complex 122

Special Patterns and Host-Parasite Interactions of  
American Mistletoe (*Phoradendron leucarpum*) on the  
Methodist University Campus

Math Behind “Dots”

Mathematics Behind Lighting and Shading Techniques  
Within 3-D Computer Graphics

Saturn: An Outer Gas Giant

The Moon and Its Craters

### Hendricks Science Complex 222

The Great American Guru: Hindu Wisdom in the Writings of Ralph  
Waldo Emerson

Creating New Minds: Emerson’s *American Scholar* and Bloom’s  
Revised Taxonomy

Emerson’s *The American Scholar*: From Words to Instruments

# PRESENTATION SCHEDULE

## AFTERNOON SESSION

### History | English

2:00 p.m. Cheri Molter

2:25 p.m. Cheri Molter

2:50 p.m. James Moran

### Education

2:00 p.m. Jaron Cayton

2:25 p.m. Brooke Hood

2:50 p.m. Renae Parker

### Chemistry

2:00 p.m. Tijana Vasiljevic

2:25 p.m. Stephanie Breitenbach

2:50 p.m. Anita Djonlic

### Communications | Computer Science

2:00 p.m. Matthew Dyson, Joyce Johnson  
Bernard Minter Jr., Travis Murphy  
David Nolan, Jessi Taitague

2:25 p.m. Amar Idrizovic

2:50 p.m. Lemuel Nicholls

## POSTER SESSION

### Exhibit

All students are  
present from  
2:00 – 3:00 p.m.

Gerron Rivenbark

Christina Giglio

Tara Blue, Chris Carter  
Ralph Hedington, Kendra Krupp  
Colton Long, Brandon Loux  
Ariel Mitchell, Chris Webster, Kyle Wilson

Kasie Clark

Amanda George

Joshua Fulbright  
(Graduate Student, MJA Program)

### Alumni Dining Room

Colonial North Carolina: A Safe Harbor for Pirates

The Subtle Use of Foreshadowing in Hurston's *Their Eyes Were Watching God*

Grammatical Inaccuracies in the *Twilight Saga*

### Reeves Fine Arts Building G5

The Importance of Innovation Throughout the Realms of Education

No Child Left Behind Act

The Effects of Poverty on Educational Outcomes

### Hendricks Science Complex 122

Voltammetric and Spectroscopic Determination of Ethanol in Blood Samples for Forensic Analysis

Determination of Tetrahydrozoline (THZ) Levels in Eye Drops

Synthesis of Difluorogingerol, a Fluorinated Biologically Active Compound: Using Selective C-C Bond Cleavage Through Trifluoroacetate

### Hendricks Science Building 222

Online Course Evaluations

Game Programming as a Tool to Develop Human Logic and Prediction

Design of a Web-based Approach to Facilitate Campus Ministries on Methodist University's Campus

### Berns Student Center

Alcohol on the Campus of Methodist University

Chamber of Commerce Profiles

The Pros and Cons of a Controversial Issue: The Keystone XL Pipeline

Are Individuals Who Frequent Online Environments More Likely to Engage in Online Social Activism

*Ulva intestinalis*: Is It the Next Phytoremediator?

Examining the Organization-Public Relationship between Community Property Managers and the Cary Police Department: A Program Evaluation of Project PHOENIX



## ALUMNI DINING ROOM | MORNING SESSION

### **THE ROLE OF EXTRACURRICULAR GROUP MEMBERSHIP FOR MILITARY AFFILIATED AND NON-MILITARY AFFILIATED STUDENTS IN ADAPTING TO COLLEGE**

Julius Toney | Senior, Psychology | Montgomery, AL  
 Julissa Corona | Junior, Psychology | La Chorrerra, Panama  
 Chepiernaél Cruz-Rodriguez | Senior, Psychology | Rio Grande, Puerto Rico  
**Advisor: Dr. Katharine Snyder**

The present study will evaluate factors influencing how well students adapt to the college environment. The impact of affiliations with organizations and the transient military population at Methodist University will be evaluated for its effect on academic and social adaptation. Students will take the Student Adaptation to College Questionnaire (SACQ) to assess social, academic, personal-emotional, and attachment factors. It is anticipated that a two-way mixed factorial MANOVA will reveal an interaction between military status (military-affiliated, non-military-affiliated) and the SACQ subscales (social, academic, personal-emotional, attachment) on the dependent measures (extracurricular activity involvement and SACQ scores). After completing the SACQ, students will review a comprehensive list of organizations and rate their participation in each one on a Likert scale, with 0 meaning no involvement and 5 meaning very active (e.g., a leader or officer). Because of the proximity of Methodist University to the military base at Fort Bragg and the high volume of military-associated students, it is anticipated that this quasi variable will affect students' capacities to be involved in extracurricular activities as well as their adaptation to college. Potential implications of the present study for freshman retention and the first year experience will be discussed.

### **AUTHORITARIAN VERSUS AUTHORITATIVE METHODS OF ALCOHOL USE INTERVENTION WITH COLLEGE STUDENTS**

Daniel Nieshe | Senior, Psychology with a concentration in Clinical and Counseling | Concrete, WA  
 Emily Jones | Senior, Psychology with a concentration in Clinical and Counseling | Shippensburg, PA  
 Ondrea Noddin | Senior, Psychology | Dayton, OH  
**Advisors: Dr. Katharine Snyder and Dr. Mark Kline**

The present study will evaluate an important variable in social psychology and adaptation to college: the impact of different intervention styles on college student drinking behavior. Binge drinking has been shown to have seriously detrimental effects for college students, such as legal problems, academic failure, and accidents. The study will contrast two methods of intervention, authoritarian versus authoritative, and measure their effect on projected and actual drinking behavior. Participants will be pre-tested, presented with one of two treatment conditions, post-tested immediately, and then post-tested again two weeks later. The authoritarian message invites no discussion and promotes an abstinence-only attitude. The authoritative message invites discussion and promotes information-based decision making. Researchers predict that those who receive the authoritative treatment will measure lower on predicted and actual drinking behavior than those who receive the authoritarian treatment. Implications for future research will be discussed.

### **A NEUROPSYCHOLOGICAL INVESTIGATION OF THE IMPACT OF COLOR ON THE PERCEPTION AND RECALL OF FIGURAL DRAWINGS**

Nabanita Choudhury | Senior, Psychology | Fayetteville, NC  
 Shereece Saxton | Senior, Psychology | Fayetteville, NC  
 Crysta Carson | Senior, Psychology | Frankfurt, Germany  
**Advisor: Dr. Katharine Snyder**

The present study will evaluate a significant variable in neuropsychology: the impact of color salience on figure/map memory. Accurate and detailed memory testing is vital to the diagnosis and treatment of neuropathology. For example, assessing visual memory (map memory) is necessary to diagnose deficits in parietal lobe function. Previous studies have indicated that colored objects have more effect on visual memory. For example, people learn and remember colored objects faster than they learn and remember black and white objects. On the basis of previous research, it is hypothesized that immediate and delayed recall will be greater for colored figures than for black and white figures. In the present study, the effect of color on visual memory will be measured by presenting the Rey Complex figure in blue and red (primary color) or in black and white. The experiment will be performed on two different groups of students, with one group receiving the black and white figure and the other group receiving the red and blue figure. After subjects view the figure, they will be asked to copy it and then draw it from memory. Following a 20-minute distractor task (word search puzzles), students will then be asked to draw the figure again from memory (delayed recall). Implications for future research will also be examined. Moreover, a famous case study will also be discussed (Secretary Brady).

## **DICHOTIC LISTENING IN RELATION TO HANDEDNESS AND BRAIN LATERALIZATION**

Kevin Johnson | Senior, Psychology and with a concentration in Clinical and Counseling | Jacksonville, NC

Megan Hesson | Senior, Psychology with a concentration in Clinical and Counseling | Mechanicsville, VA

Advisor: Dr. Katharine Snyder

The present study will evaluate important neurological distinctions in the way we process verbal stimuli in the left and right hemisphere, especially when our attentional resources are overloaded. The study will use a dichotic listening format in neuropsychology. Dichotic listening studies have consistently shown a right-ear/left-hemisphere advantage for identifying and recalling verbal communication. A dichotic listening test is commonly used to test selective attention within the auditory system through the use of multiple verbal stimuli (e.g., talking on the phone while watching television). Traditionally, the test shows a strong right-ear/right-hand advantage. Rather than asking participants, we are going to test laterality with a handedness questionnaire (e.g., asking a participant to draw a stick figure or kick a ball). It is anticipated that right handers will have a right ear advantage while left handers and those who are ambidextrous will show no advantage.

## **TEXTSPERIMENTING: A NORMS-BASED INTERVENTION FOR BINGE DRINKING**

Lory (Dan) Nieshe | Senior, Psychology with a concentration in Clinical and Counseling | Seattle, WA

Julius Toney | Senior, Psychology | Montgomery, AL

Cindy Mendez Segovia | Senior, Psychology | Fayetteville, NC

David Cleveringa | Freshman, Psychology | Pinehurst, NC

Chelsea Smith | Senior, Psychology | Fayetteville, NC

Brittany Wiggs | Senior, Biology | Fayetteville, NC

Lindsay Stinson | Junior, Psychology | Fayetteville, NC

Advisor: Dr. Mark Kline

College student drinking has been the source of much concern for faculty and administrators across the country (Wechsler, et al., 1995; Weschsler, et al., 1999). The purpose of the textsperimenting program was, ostensibly, to teach freshmen about different research opportunities at Methodist University. The program actually contained a subtle norm-based intervention designed to reduce binge drinking among college students (Haines, et al., 1996). Results from this experiment are presented indicating significant and important reductions in binge drinking among Methodist University students. Freshmen who attended the textsperimenting presentation demonstrated a significant reduction in the highest amount of alcohol consumed on any single occasion compared to freshmen who did not attend the event. Those who attended also demonstrated a reduction in the number of days they consumed alcohol as compared to those who did not attend. These results indicate that the textsperimenting norm-based intervention was effective at reducing both how much and how often students at Methodist University drank alcohol.

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## REEVES G5 | MORNING SESSION

### **ECONOMICS OF HUMAN TRAFFICKING IN CENTRAL AMERICA**

Gina Martinez | Senior, Accounting with a concentration in Business Administration and International Business | Pismo Beach, CA

Advisor: Dr. Spencer Davis

From February 26, 2014, through March 6, 2014, I will be traveling to Guatemala for my Economics 485 course. The purpose of my study abroad course is to research black market economics. My concentration will be on human trafficking. My goal is to research the effects of the black market within the areas where I will be traveling. I am fortunate to have access to many key contacts via the United States Embassy in Guatemala City. During my time in the country, I plan to seek their assistance in collecting information relevant to my topic, as well as coordinate speaking opportunities with key personnel who are subject matter experts regarding modern slavery in Guatemala. I hope that this project will bring awareness to the ramifications of contemporary slavery in Guatemala and other regions of Central America.



## **HOW NEW WORLD TREASURE LED TO SPAIN'S FINANCIAL CRISIS**

Grizel Bello | Junior, Nursing and Psychology | Santiago de Cuba, Cuba

Advisors: Dr. Carl Dyke

My research, titled "How New World Treasure Led to Spain's Financial Crisis," discusses how the incorporation of New World gold and silver into Spain's monetary system brought about great price inflation and an increase in taxes, which, coupled with the expansionist activities of the monarchy, led to the need for a credit-based financing system. These factors created excessive borrowing and a system that was unsustainable, which resulted in a financial crisis and the collapse of Spain's economy. My findings show how the influx of New World treasure not only increased Spain's wealth and social status but also led to its downfall by creating a credit-based system with which Spain unsuccessfully attempted to keep its economy afloat. This research can be used to analyze today's national and global economy and how said factors of wealth can result in a self-destructive system that leads to a financial crisis.

## **POSITIVE OUTCOMES IN SOCHI – THE HOST CITY OF THE WINTER OLYMPIC GAMES IN RUSSIA**

Iuliia Melnikova | Freshman, Business Administration with a concentration in International Business

Perm City, Russian Federation

Advisor: Dr. Kimberly Scruton

The Olympic and Paralympic games are the biggest sports events in the world; they are held over several weeks and watched by millions of people around the globe. Created at the end of the nineteenth century, the Olympic Games combine sport, culture, education, and environmental awareness in order to foster healthy lifestyles, provide positive role models, and promote respect for core universal values. The games also have a significant impact on their host cities and countries, as this paper will demonstrate through the case of Russia's bid to host the XXII Winter Olympics in Sochi. The roots of the Russian bid to host the Olympic Games go back to the first half of the 2000s, when the midterm development of Russia's southern region was given top state priority with respect to socioeconomic policy. Thus, the development of Sochi gained key significance owing to the region's unique geography, climate, and recreational resources. In 2006, the federal target program, "Development of Sochi as an Alpine Resort (2006–2014)," was put together and approved. The program was based on the concept of sustainable development, with the organizers tapping into the possibilities provided by the Olympic project in order to foster positive economic, social, and environmental change. This is the first project of its size in Russia carried out on the basis of sustainable development principles. The games' potential was initially tapped to transform Sochi and create a lasting legacy for the city, the region, and Russia in general.

## **INCOME INEQUALITY WITHIN NATIONS**

Lois N. M. Hammond | Senior, Political Science with a concentration in International Relations | Osu, Ghana

Advisor: Dr. Andrew Ziegler

This is an empirical and quantitative research study on income inequality within nations. The research question was "How is income inequality within nations related to other characteristics of nations?" The 2011 Global File in MicroCase was used to conduct this research. The different characteristics were grouped in three categories: political, social, and economic. The independent variables consisted of state control of the economy, political instability, education, population growth, human development, economic development, percentage of GDP from agriculture, and GDP growth. Human development and industrialization were the strong indicators of income inequality while all the political factors—state control of the economy and political instability—have no bearing on the level of income inequality. Findings from this research will be beneficial to policy makers and government officials who are seeking to reduce income inequality in their countries. Countries that have high income inequality can look to countries that have low income inequality and the characteristics that those countries have to know what they need to work on.

## **ORIGINS OF HUMAN RELIGIOSITY: A MATERIALISTIC PERSPECTIVE ON EASTERN RELIGIONS**

Jamie Mulkern | Senior, English | Fort Bragg, NC

Advisor: Dr. J. R. Hustwit

The occurrence of death is unfortunate for a variety of reasons, including the realization by many sentient beings that there is ultimately no objective proof that our consciousness exists beyond death. Instances of "proof" that do exist are subjective and unverifiable. This realization takes into account the various religious beliefs of life after death; however, these beliefs alone cannot be valued as sole indicators of "truth," as there is no absolute knowledge or certainty that human consciousness ceases to exist at the moment of our expiration. By applying a materialistic perspective to the Eastern religious teachings and philosophies of Hinduism, Buddhism, and Taoism, this paper examines why human beings continue to be religious and hold on to particular beliefs and practices with the purpose of attaining some form of immortality. The author finds that human religiosity is a reflection of fears concerning suffering, death, and the unknowable universe, which leads to the construction of religious beliefs and systems in an effort to fulfill humanity's desire for a purposeful meaning in life and hope of an existence beyond death.

## **SPECIAL PATTERNS AND HOST-PARASITE INTERACTIONS OF AMERICAN MISTLETOE (PHORADENDRON LEUCARPUM) ON THE METHODIST UNIVERSITY CAMPUS**

Erin Fegley | Senior, Biology with a concentration in Ecology and Natural History of Plants | Morehead City, NC

Advisor: Dr. Clay Britton

*Phoradendron leucarpum* (American mistletoe) is a hemiparasitic plant that can be found on most hardwood trees in the eastern United States. Last year, I visually estimated the amount of mistletoe present in the hardwood trees on campus. I also took GPS waypoints of the trees that contained mistletoe and discovered some patterns as to the spatial arrangement and host parasite relations of this plant. In this year's research I will be visually surveying the trees again to determine whether there has been any biomass increase, and I will be investigating the true host-parasite relations to find out whether mistletoe prefers oak trees or whether they are simply found on oak trees because oak trees are more prevalent. I hypothesize that the mistletoe will have increased in biomass by 30% over the past year, and that oak trees are the most susceptible to infection of the parasite. In order to properly determine the significance of any change, statistical analyses will be performed.

## **MATH BEHIND DOTS**

Amar Idrizovic | Senior, Computer Science and Mathematics | Gornji Vakuf, Bosnia and Herzegovina

Advisor: Dr. Peggy Batten

My presentation will be about the math behind the popular game Dots. It will be based on Number Theory topics like game theory, combinatorial math, and graph theory. Considered by most mathematicians to be the "purest of all math," Number Theory has recently regained vast popularity because of modern technology—the Internet. The main focus will be how to play the perfect game. This research is designed to investigate and analyze the different versions of Dots and how they affect and change the game through theoretical math and digital simulations. The presentation will be for everyone, whether he or she is familiar with Number Theory or not, because using advanced math theory to explain something ordinary and familiar like the game Dots is always fun.

## **MATHEMATICS BEHIND LIGHTING AND SHADING TECHNIQUES**

Samantha Scoggins | Junior, Mathematics and Computer Information Technology with a concentration in Multimedia, Computer Art, and Programming | Wendell, NC

Advisor: Dr. Shivappa Palled

The purpose of this project is to research and understand through existing knowledge the processes and their mathematical backgrounds that help to implement effective and realistic lighting and shadowing in 3-D computer graphics. This project should address certain areas such as the movement of light, the representation of light in computer graphics, and the techniques that are used to implement shading in computer graphics. Some mathematical concepts implemented to help represent light in computer graphics are vectors, trigonometry, geometry, and certain aspects of linear algebra.

## **SATURN: AN OUTER GAS GIANT**

Nicole Cole | Senior, Middle Grades Education with a concentration in Science and Math | Springfield, OR

Advisor: Dr. John Dembosky

The presentation of the outer gas giants will focus on the planet Saturn, which is the sixth planet from the sun and the second largest planet in the solar system. Saturn has a prominent ring system that consists of nine continuous main rings and three discontinuous arcs, composed mostly of ice particles with a smaller amount of rocky debris and dust. Sixty-two known satellites orbit the planet; fifty-three of these are officially named. This does not include the hundreds of "moonlets" comprising the rings. Titan is Saturn's largest satellite and the solar system's second largest satellite; it is larger than the planet Mercury and is the only satellite in the solar system to retain a substantial atmosphere.

## **THE MOON AND ITS CRATERS**

David Nolan | Senior, Organizational Communication & Leadership | Boston, MA

Advisor: Dr. John Dembosky

The presentation of the moon and its craters will offer scientific opinion as to the origin of the craters. There are competing theories on how the craters were formed, and this presentation will use evidence collected during the Apollo project and from unmanned spacecraft of the same time period to test these theories. The formation of new craters that are being studied by the lunar impact monitoring program at NASA will also be discussed.

## **THE GREAT AMERICAN GURU: HINDU WISDOM IN THE WRITINGS OF RALPH WALDO EMERSON**

Jamie Mulkern | Senior, English | Fort Bragg, NC

Advisor: Dr. Kelly C. Walter Carney

Before he became recognized as one of the greatest American scholars of the mid-19th century, Ralph Waldo Emerson was interested in the philosophical and spiritual teachings of India. Much of Emerson's writing contains Hindu spiritual themes and aspirations. An understanding of Hindu teachings and practices offers a new perspective on the traces of Transcendentalist philosophy present in Emerson's writings. This paper examines the Eastern religious influence in Emerson's address, "The American Scholar," and the answers that Hindu teachings and literature provide in navigating the path to divine wisdom and enlightenment in order to attain a higher consciousness.

## **CREATING NEW MINDS: EMERSON'S *AMERICAN SCHOLAR* AND BLOOM'S REVISED TAXONOMY**

Emily E. Guidry | Sophomore, Elementary Education | Fayetteville, NC

Advisor: Dr. Kelly C. Walter Carney

Ralph Waldo Emerson's *The American Scholar* criticized the American education system of his time for concentrating on students' memorization of facts from the past and not focusing on making modern thinkers who can create their own opinions and thoughts. Emerson's criticism of education is not lost on 21st-century elementary school educators. Teachers and instructors must find the balance between a positive assessment of what a student understands and has learned and how a student will use these facts in higher education and adulthood. Because of the importance of children's learning, educators have adapted a new framework, Bloom's Revised Taxonomy, adopting the "creating" standard of learning. In *The American Scholar* Emerson states that he longs for American students to have creativity in learning. His fear was that scholars and educators would focus on books and instructors from the past and never allow students to be creative and develop their own thoughts from personal experience. Emerson would be satisfied to know that "Create" has become the highest form of cognitive learning in the Bloom's Revised Taxonomy of Educational Objectives today. The new Bloom's Revised Taxonomy revolutionized creative thinking and original thought in education, and correlates with Emerson's ideal American education.

## **EMERSON'S *AMERICAN SCHOLAR*: FROM WORDS TO INSTRUMENTS**

Emory Jacobs | Sophomore, Music | Fayetteville, NC

Advisor: Dr. Kelly C. Walter Carney

Emerson's famous speech will be approached not with text but with melody, as his most central statements have been converted into musical ones. For instance, the analytic tone of religion may stand at odds with the counter-melody of what it means to be a scholar. In contrast, his thoughts on nature harmonize with what it means to be a part of society. By converting his ideas into such melodies, one begins to see links between both the literary and musical arts as well as the values of Emerson himself.

## **COLONIAL NORTH CAROLINA: A SAFE HARBOR FOR PIRATES**

Cheri D. Molter | Senior, English and History | Fayetteville, NC

Advisor: Dr. Patrick W. O'Neil

This research paper examines the characteristics of eighteenth-century North Carolina by analyzing primary sources found in the Colonial & State Records of North Carolina. I argue that, unlike the residents along the coastlines of South Carolina and Virginia, North Carolinians shared a mutually beneficial relationship with the pirates who traveled into the inlets around the Outer Banks. The colony of North Carolina was unique, one in which the people owned land and enjoyed religious freedom but were isolated from much of the Atlantic trade. The demographic of settlers included a mixture of classes, religions, and races that led to more diversity among landowners than in any other colonial society. Those people formed a society that did not define criminal activity in the same manner as their Virginian neighbors, and they enjoyed more personal freedoms because of a less stringent local government. As a result of these factors—the demographics of the population, the informal structure of government, and the geographic obstacles to legal trade—pirates, who provided luxury goods at cheaper prices than England and were an easily accessible source for trade, were embraced by the people and accepted into North Carolina communities.



## **THE SUBTLE USE OF FORESHADOWING IN HURSTON'S *THEIR EYES WERE WATCHING GOD***

Cheri D. Molter | Senior, English and History | Fayetteville, NC

Advisor: Dr. Emily Wright

In *Their Eyes Were Watching God*, Zora Neale Hurston uses foreshadowing in several different ways, some obvious and some quite subtle, in order to evoke particular emotions from the reader. A particularly striking use of foreshadowing occurs early in Janie's relationship with each of her husbands. The three different modes of transportation offered by each man inconspicuously hint at the type of relationship Janie will have with each husband, which allows the reader to prepare for the next phase of Janie's self-discovery. Specifically, the paper analyzes the significance of Hurston's choice of a wagon, a hired rig, and a car for the three very different men of Janie's life, as she begins her time with each of them. The paper will also discuss the importance of the fact that only two of the three means of conveyance require a beast of burden.

## **GRAMMATICAL INACCURACIES IN THE *TWILIGHT* SAGA**

James Moran | Senior, Writing | Lillington, NC

Advisor: Dr. Emily Wright

My CURC Symposium project reveals the grammatical inaccuracies and creative-writing offenses of a well-known book series that has sold millions worldwide and has inspired a cultural phenomenon. That series is the *Twilight* saga, written by Stephanie Meyer, about vampires, werewolves, and the one depressed high-school girl stuck in the middle of it all. In 1997, Meyer received a B.A. in English at Brigham Young University, but judging by the textual content in the four books that catapulted her to fame and fortune, it is clear that she failed to recall what she learned in Grammar 101. In Methodist University terms, Meyer commits every crime listed under the Dirty Dozen: misplaced modifiers, comma splices, inappropriate shift in verb tense, etc. Also, Meyer does everything that a creative fiction writer should not do, including liberal use of adverbs, inconsistent plot points, lack of character development—the list goes on. To find the errors and inaccuracies of Meyer's work, I will reread all four *Twilight* books and edit them as I go along. By utilizing the skills I have acquired from my past writing courses at Methodist University (Advanced Grammar, Fiction Writing), I will pinpoint the most obvious mistakes in Meyer's work. I will gather the numbers and display them on a PowerPoint presentation. Within the fifteen minutes allotted for the presentation, I will highlight only the most egregious grammatical errors. In addition, I will present Meyer's major creative-writing offenses. I will provide textual evidence via PowerPoint.

## **THE IMPORTANCE OF INNOVATION THROUGHOUT THE REALMS OF EDUCATION**

Jaron Cayton | Senior, Special Education | Fayetteville, NC  
Advisor: Dr. Jennifer Mour

This paper discusses the importance of innovation throughout the realms of education. While the current trend is to implement technology, educators must be willing to continue to improve education in other areas. Those areas are discussed in detail, including educational best practices, enhancement of instruction through technology, defining and implementing true learning, and promoting student engagement and motivation. Because technology remains at the forefront of all educational reform, teachers must receive training along with this technology in order to implement it effectively. Furthermore, this technology cannot replace quality instruction; it can only enhance that instruction. These best practices must be combined with new ways to understand student learning. Some new ideas include classroom setup, student grouping, goals, and standardized testing. Also, these practices must be implemented in an effort to engage students in this new “authentic” learning. Educators must promote transfer in instruction in order for students to gain skills that can be used in this changing world. Some skills include reading comprehension, math, and computer literacy. These skills, along with the problem-solving skills that accompany them, can equip our students for the changing world much more effectively than current standardized goals can.

Educators no longer have the option to consider whether they will utilize technology in the classroom. The question has changed, and teachers must now consider how to use the technology effectively in the classroom. In order to answer this question, educators must examine several key issues, including educational best practices, technology as enhancement and not replacement, new ways to look at learning, and, lastly, new ways to promote student engagement and a holistic education.

## **NO CHILD LEFT BEHIND ACT**

Brooke Hood | Senior, Elementary Education | Panama City, FL  
Advisor: Dr. Jennifer Mour

This research paper examines the No Child Left Behind Act (NCLB) and its negative effects created within our school systems. The requirements of No Child Left Behind are many and have impacted education at all levels. Issues examined in this paper include the development of content standards and the accompanying assessments, the stress placed on teachers and students to perform well, and the decline of creativity and pedagogy of teaching. Further, it examines the alarming rate of teacher attrition and the rise in cheating scandals that are the result of attempts to avoid the consequences of low performance on mandated standardized tests.

## **THE EFFECTS OF POVERTY ON EDUCATIONAL OUTCOMES**

Renae Parker | Senior, Middle Grades Education with a concentration in Language Arts and Social Studies | Pentress, WV  
Advisor: Dr. Jennifer Mour

The impact of poverty on the education systems of the United States is often found to be a cause for concern when discussing how to improve the education system as a whole. Great strides have been made throughout the last century to improve the quality of education that all students receive, but the gap between our most successful school systems and our least successful school systems continues to expand. Not all students' needs are equal; the possible solutions to the disparity in opportunities available to students come in many forms and fit differently for each school and each student. Research has shown that issues such as funding, teacher qualification, and community have a huge impact on student outcome and are instrumental in providing the necessary framework for student success.

There is no right answer to the question of what plagues the public school systems in relation to poverty and student outcomes. Research shows that funding for school systems continues to be uneven and unfair across social classes and the availability of highly qualified teachers will continue to be a problem in the high-poverty school districts unless a fundamental change in culture comes along that supports education as a necessity to improving each person's quality of life.

## **VOLTAMMETRIC AND SPECTROSCOPIC DETERMINATION OF ETHANOL IN BLOOD SAMPLES FOR FORENSIC ANALYSIS**

Tijana Vasiljevic | Senior, Chemistry with a concentration in Forensic Science | Bihac, Bosnia and Herzegovina  
 Advisor: Dr. Stephanie Hooper-Marosek

The detection and quantification of ethanol is a very important analysis that is often conducted in forensic chemistry and toxicology. Recent research suggests that samples that contain a common yeast, *Candida albicans*, tend to have elevated levels of ethanol within them. It has also been shown that samples containing an excess of glucose show elevated levels of ethanol. The purpose of this research is to focus on analysis of blood samples in order to examine the ethanol concentration levels. Sheep's blood will be used for the research with the possibility that homogenized human blood samples will be provided during the semester. The research will use the electrochemical method of linear sweep voltammetry and UV/Vis spectroscopy in order to quantify ethanol. Blood samples will also be treated with sodium fluoride in order to examine whether blood containing anticoagulants gives different ethanol concentration level readings as opposed to those that do not contain any anticoagulants. The ultimate goal of this research is to quantify a relationship between ethanol and its varying concentrations in biological samples, which are important for forensic analysis.

## **DETERMINATION OF TETRAHYDROZOLINE (THZ) LEVELS IN EYE DROPS**

Stephanie Breitenbach | Senior, Chemistry with a concentration in Forensic Science | Owings, MD  
 Advisor: Dr. Stephanie Hooper-Marosek

Tetrahydrozoline (THZ) is a compound that is commonly found in certain brands of over-the-counter ear drops and eye drops such as Visine, targeting specific symptoms such as redness. This substance is used to give one individual an edge over another. If ingested orally, THZ depresses the central nervous system and leaves victims vulnerable to sexual assault. This compound impairs memory and judgment, and it produces a period of unconsciousness. This drug is not easily identified by typical drug analysis, and it is very easy for an individual to obtain. A recent case study evaluated a woman who had ingested a drink containing unknown amounts of THZ. About 20 hours after the drug had been ingested, both blood and urine samples were taken. No drugs were found in her blood, but THZ was detected in her urine using a method known as gas chromatography (GC).

The purpose of this research is to analyze levels of THZ in different brands of eye drops. Protocol for this work includes standard solution preparation and quantitative analysis of these standards by Ultraviolet/Visible (UV/Vis) spectroscopy. In addition, amounts of THZ would be measured in the different types of eye drops. Ultimately, these results would be beneficial in determining the amount of eye drops that must be ingested to achieve the desired effects. It would also allow for further investigation of how the THZ interacts with the human body, is metabolized, and produces certain symptoms.

## **SYNTHESIS OF DIFLUOROGINGEROL, A FLUORINATED BIOLOGICALLY ACTIVE COMPOUND: USING SELECTIVE C-C BOND CLEAVAGE THROUGH TRIFLUOROACETATE**

Anita Djonlic | Senior, Chemistry with a concentration in Biochemistry | Maglaj, Bosnia and Herzegovina  
 Advisors: Dr. Stephanie Hooper-Marosek and Eun Hoo Kim

[6]-gingerol is the most abundant and biologically active constituent of ginger. The presence of a  $\beta$ -hydroxy keto group causes [6]-gingerol to undergo rapid dehydration and form [6]-shogaol in the body. Forming a more stable analogue of [6]-gingerol could solve this problem. Fluorinating biomolecules has been gaining significant attention, due to fluorine's exceptional thermal stability. This paper proposes a novel synthesis method of [6]-2, 2-difluorogingerol, a fluorinated analog of [6]-gingerol. The method of trifluoroacetate release by C-C bond cleavage, developed by Colby and co-workers, has been applied for a three-step synthesis of the fluorinated [6]-gingerol analog. The first step generates reactive tautomers, which are fluorinated with Selectfluor. Finally, the aldol reaction using hexanal generated the desired product. The benefits of this approach include mild conditions, use of commercially available products, and a higher reaction yield than the previously reported route. Thin-layer chromatography,  $^1\text{H}$  NMR spectrum, and  $^{19}\text{F}$  NMR spectrum were obtained for the first two reactions. Results indicate the need for changing of the first two reactions' conditions in order to obtain higher reaction yields. The changes will not result in lengthening the synthetic approach.



## ONLINE COURSE EVALUATIONS

Mathew Dyson | Junior, Organizational Communication and Leadership | Mocksville, NC  
 Joyce Johnson | Senior, Mass Communication with a concentration in TV/Multimedia and Journalism | Las Vegas, NV  
 Bernard Minter, Jr. | Junior, Organizational Communications and Leadership | Raleigh, NC  
 Travis Murphy | Senior, Organizational Communications and Leadership | North Augusta, SC  
 David Nolan | Junior, Organizational Communications and Leadership | Fayetteville, NC  
 Jessi Taitague | Senior, Organizational Communications and Leadership | Fayetteville, NC

Advisor: Dr. William Watt

In comparison to paper evaluations, online course evaluations allow for fewer students to complete the evaluations, resulting in a smaller pool of information that may be assessed. Course evaluations are a key tool for any university to assess the efficiency of a course and instructor. During the fall semester of 2013, Methodist University announced that course evaluations would be available to complete online. When students attempted to access these evaluations, many encountered challenges in completing the form. Concerns that arose ranged from accessibility to the forum to the privacy of their comments. Finding many students with similar concerns led to research on data that would determine the effectiveness of the online evaluations, interviews with students, and methods for improving student completion of the evaluations. In our paper and with the research provided, we will present to Methodist University a more effective way to gather course information while providing ease of access to complete it.

## GAME PROGRAMMING AS A TOOL TO DEVELOP HUMAN LOGIC AND PREDICTION

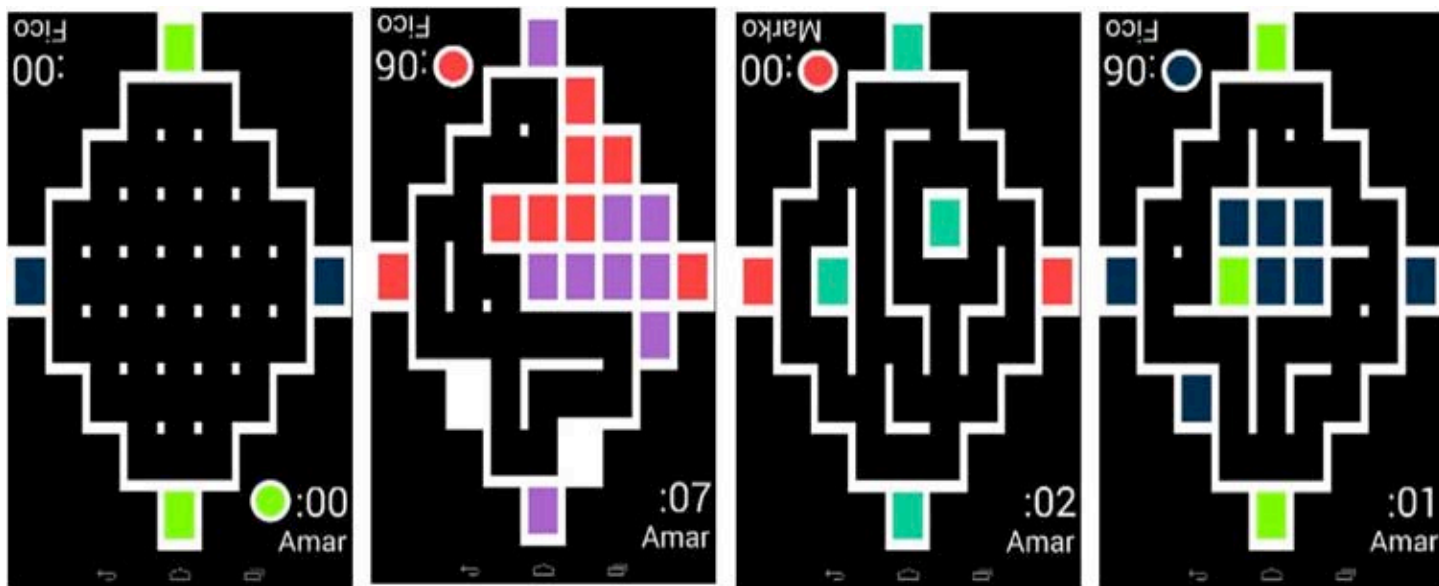
Amar Idrizovic | Senior, Computer Science and Mathematics | Gornji Vakuf, Bosnia and Herzegovina

Advisor: Dr. Terry C. House

I have been working on an interactive game for Android smartphones and tablets. Android is the world's most popular mobile OS that powers more than a billion phones and tablets around the world. The game is coded in Java programming language using Google's Android Standard Development Kit (SDK) with Eclipse.

Practical Application: It is an engaging logical game for two players in which the goal is to predict the moves of one's opponent and complete as many squares as possible, very similar to Dots. There is also an extreme version of the classic game that randomizes the playing grid before the game starts, bringing more variety to the game. I have also attached a couple of screenshots of the game from my Android tablet.

Result: The result of this project is a game designed for two players to think logically about what their opponent will do when it is their turn to engage the interface. Hopefully this game will stimulate each player to expand his or her understanding of prediction as it pertains to logic and human behavior.



# **DESIGN OF A WEB-BASED APPROACH TO FACILITATE CAMPUS MINISTRIES ON METHODIST UNIVERSITY'S CAMPUS**

Lemuel Nicholls | Senior, Computer Information Technology with a concentration in Business Information Systems  
Georgetown, Guyana

**Advisor: Dr. Terry C. House**

For my Senior Project class, I have created a web-based database. The program is coded with HTML, JavaScript, PHP, and MySQL.

**Practical Application:** The purpose is to allow Methodist University Campus Ministry to manage students who would like to go on mission trips. Here they will be able to add students, change trip locations, and manage fundraising events and deposits. The second part of the project allows for Mike Safley to save documents and video links for his IDS classes.

**Result:** The result of this project is a web-based database that will allow Campus Ministry administrators to manage their mission trips each year in an easy-to-understand, user-friendly environment.

## **ALCOHOL ON THE CAMPUS OF METHODIST UNIVERSITY**

Gerron Rivenbark | Senior, Social Work | Rose Hill, NC

Miriya Bryant | Senior, Social Work | Laurel Hill, NC

Advisors: Dr. Carla Fagan and Dr. George Hendricks

In the college setting, no longer do parties consist of animal crackers and juice boxes. For first-year students who are introduced to new experiences of independence, this idea of new-found freedom is widely accepted and expressed through excessive partying, in which alcohol consumption is a part. In comparison, upper-class veterans are no stranger to this idea of liberty and may continue to practice it. Students living on the campus of Methodist University are no exception to this type of expression. However, unlike other universities in the state of North Carolina, Methodist University is a dry campus. Student surveys administered to 100 freshmen and 100 upper-level students on the university's campus provide more in-depth knowledge on the subject of freshman alcohol consumption in comparison to consumption by upper-level students at Methodist University.

## **CHAMBER OF COMMERCE PROFILES**

Christina Giglio | Senior, Business Marketing | Katy, TX

Advisor: Dr. Kimberly Scruton

In working with the Fayetteville Chamber of Commerce, we have discovered that its members are struggling with their online profiles through the Chamber's website. Memberships include these profiles – free of charge – with every new member's package. New members are struggling to complete their profiles on their own. The online profile helps each business reach more potential customers when it is completed in its entirety. My project will focus on a specific target market in helping them complete their profiles and improve their web presence. My target group is small businesses with between two and 10 employees. Initial contact with each business will include a snapshot of its business and how it looks on the Internet on day 1 of the project. Upon completing their Chamber profile, I will follow up with them at the conclusion of this project and submit to them their final snapshot (day 30-40) of their business and hopefully show that their web presence has improved. During this project I will also have help from five marketing ambassadors. I will hold a training session and teach them how to correctly help businesses update their profiles. I and the five marketing ambassadors have set a goal to complete at least 50 businesses' profiles and increase their knowledge about their profiles in hopes that in the future they can easily edit and continue to benefit from our services.

## **THE PROS AND CONS OF A CONTROVERSIAL ISSUE: THE KEYSTONE XL PIPELINE**

Tara Blue | Junior, Business and Environmental Management | Columbia, MO

Chris Carter | Senior, Environmental Management | Shelby, NC

Ralph Hedington | Junior, Environmental Management and Religion | St. Kits, Neves

Kendra Krupp | Senior, Environmental Management and Legal Studies | Carson City, NV

Colton Long | Senior, Environmental Management and Legal Studies | Robbins, NC

Brandon Loux | Junior, Environmental Management and Justice Studies | Appleton, WI

Ariel Mitchell | Junior, Environmental Management and Legal Studies | Trinidad and Tobago

Chris Webster | Junior, Environmental Management and Natural Resource Management | Lexington, GA

Kyle Wilson | Junior, Environmental Management and Legal Studies | Clayton, NC

Advisor: Dr. Deborah Branson

We will present the pros and cons of a controversial issue: the Keystone XL pipeline. The pro side of this argument claims that it will create jobs in the U.S., reduce dependency on foreign oil, and provide a safe means of transporting oil across the country. The con side points to the spills that have occurred from existing pipelines and the environmental damage that has happened as well as to the health and safety problems posed to communities through which they pass. Many political issues are involved. The project requires approval from the Secretary of State because the pipeline crosses an international boundary. Our president has been involved as well, taking into consideration both sides of the matter. We would like to engage other students in the debate while we present. All individuals who vote should be aware of the issues that become political "hot potatoes" and should understand how and when they can participate in the process.



## **ARE INDIVIDUALS WHO FREQUENT ONLINE ENVIRONMENTS MORE LIKELY TO ENGAGE IN ONLINE SOCIAL ACTIVISM**

Kacie Clark | Freshman, Computer Science | Fayetteville, NC  
Advisor: Whitney Larrimore Strickland

This study uses a mixed method approach analyzing both quantitative and qualitative data to investigate the following question: are individuals who frequent online environments likely to engage in online social activism?

To address the issue, the researcher used a brief survey, approximately 15 questions in length and delivered online to participants via Google forms as a study instrument. The survey covers demographics, Likert-type questions, and short response questions aimed at gathering information on experiences users have had online, specifically those regarding users' age, gender, sexuality, race, or state of ability.

A pilot study conducted on 26 individuals indicated that study individuals who regularly spend time in online environments also engage regularly in online social activism. The pilot study indicated an increase in socially conscious individuals aged 18-25 years, most of whom were females. All individuals surveyed answered "yes" regarding their support of equality of all races, genders, sexualities, etc.; since there is no guarantee of honesty among individuals responding, honesty and study population size are study limitations.

The data is useful inasmuch as it suggests that at least among the study group, many current political and social topics, such as equality of Gender/Sexuality/Romantic Minorities (GSRM) and a rising desire for racial and ethnic equality are important areas of online social activism; thus researchers should consider online environments' influence on social activism as they conduct research on that topic.

To further test these findings, a second study is being conducted with forthcoming results that will be shared during the symposium.

## **ULVA INTESTINALIS: IS IT THE NEXT PHYTOREMEDIATOR**

Amanda George | Senior, Biology | Fayetteville, NC  
Advisor: Dr. Clay Britton

Phytoremediation is a technique currently being put to use by many research programs across the U.S. as a way of removing contaminants from water sources in rivers and estuaries. Research suggests that the algal species *Ulva intestinalis* is capable of taking up nitrate in significant amounts. However, studies conducted on the algae were in nutrient pulses with a stable salinity in each of the replicates. It is important to research the algae farther in order to gain more understanding of its potential use in phytoremediation. I want to test its ability to uptake nitrates in varying salinities. Since research suggests that *U. intestinalis* can withstand high and fluctuating salinity and takes up nitrate in varying concentrations, when it is exposed to both variables simultaneously, the outcome should be similar. This experiment is important to the department and to further research because if one knows at what salinity the algae functions best, then one can determine at what location along the river the algae would need to be placed to be the most effective. I hypothesize that the results of the experiment will show that *U. intestinalis* is capable of nitrate uptake in all salinities with little to no adverse effects on the algae itself.

## **EXAMINING THE ORGANIZATION-PUBLIC RELATIONSHIP BETWEEN COMMUNITY PROPERTY MANAGERS AND THE CARY POLICE DEPARTMENT: A PROGRAM EVALUATION OF PROJECT PHOENIX**

Joshua Fullbright | Graduate student, Master of Justice Administration | Fayetteville, NC  
Advisor: Dr. Clay Britton

Police departments globally are concerned with deterring crime and reducing issues impacting quality of life. The Town of Cary Police Department in Cary, NC sought a progressive means of addressing crime and quality of life issues in specific populations in the town. Multi-family communities, primarily apartments, are the specific focus of a recently formed program called Project PHOENIX. For over two years, the program has targeted the deterrence of crime and reduction of quality of life issues through a voluntary partnership between police and community managers.

This research will examine a number of programs seeking to accomplish similar objectives through different means. Relationships have a direct impact on the effectiveness of a partnership and thus the relationships between the police department as an organization and community managers as their public will be measured for program evaluation. Through the use of a reliable survey instrument, perceptions across various components may be measured to determine the strength and type of organization-public relationship formed through the program. A promising future for all stakeholders is revealed following an in-depth analysis of feedback that shows a growing, mutually-beneficial relationship between police and community managers of Project PHOENIX.

## An Update on the Center for Undergraduate Research and Creativity

From Dr. Clay Britton, Director

The 2013-2014 academic year has been an exciting one for the Center for Undergraduate Research and Creativity. The students, faculty, and staff of the University have embraced the mission of the Center, and have truly taken advantage of all of the opportunities the Center provides. A few highlights from this year:

- ◆ Students have been awarded nearly \$6,400 to assist them in their travel to conferences or to purchase supplies and equipment for their projects.
- ◆ The Center implemented a Fellowship Program, which provides a more rigorous avenue for students to immerse themselves in a culture of research and creativity (For more information, visit [www.methodist.edu/research/programs](http://www.methodist.edu/research/programs)).
- ◆ We have teamed up with the Methodist University Writing Center to create the *Monarch Review: MU's Journal of Undergraduate Research and Creativity* (More information about this publishing opportunity can be found at the end of this program or by visiting [www.methodist.edu/monarchreview](http://www.methodist.edu/monarchreview)).
- ◆ Methodist University will be hosting the North Carolina Academy of Science in 2016.

The development and implementation of all these projects takes a great deal of hard work. I would now like to take the time to thank each of the members of my Internal Advisory Board. They are:

- ◆ Mr. Daniel Bennett | School of Science and Human Development
- ◆ Dr. Lori Brookman | School of Health Sciences
- ◆ Dr. Del Crisp | *ex officio*
- ◆ Dr. Christina Francescon | School of Arts and Humanities
- ◆ Mr. John Herring | School of Science and Human Development
- ◆ Dr. Eric See | School of Public Affairs
- ◆ Dr. Pam Strickland | Reeves School of Business
- ◆ Dr. Larry Wells | School of Arts and Humanities
- ◆ Dr. Emily Wright | School of Arts and Humanities

I thank all of you, the Methodist University community, for helping make the efforts of the Center for Undergraduate Research and Creativity a success.

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## An Update on the Lura S. Tally Center for Leadership Development

*From Dr. Andrew Ziegler, Director*

The Leadership Pathway presents students with multiple avenues for personal discovery, intellectual growth, and professional development. Here are some of the opportunities available to Monarchs:

### ♦ NATIONALLY KNOWN GUEST SPEAKERS

#### **The Category 5 General Comes to Methodist**

On Sept. 6, 2013, the Tally Center for Leadership Development sponsored a lecture entitled, "Leadership in the New Normal," by LTG (Ret.) Russel L. Honoré, who commanded the U.S. forces who restored order in New Orleans following the devastation of Hurricane Katrina in 2005. Speaking to a capacity audience in Huff Concert Hall, Honoré harkened back to Washington's Christmas 1776 "Crossing of the Delaware" to focus on the innovative thinking and personal sacrifices necessary when the security of society is under constant threat.

#### **Tally Center Speaker Offers Humorous Take on Leadership**

On Oct. 28, 2013, James Robilotta addressed the Huff Concert Hall audience on the topic "Leadership: More Action, Less Title." Through a self-deprecating look at some of his own life experiences, he delivered a message telling how to transition from being uninvolved to becoming engaged and involved on campus. Robilotta, an award-winning "street rapper," brought the house down at the conclusion of the talk with an extemporaneous rap with the help of a volunteer beatbox, student Brittany McCoy.

### ♦ LEADERSHIP FELLOWS PROGRAM

Students committed to making a real difference in the world have an avenue for personal leadership development in the Leadership Fellows Program. Here they acquire the knowledge, values, skills, and practical experiences to empower them for extraordinary leadership. Participation is through a nomination/selection process based on academic achievement, exceptional character, and commitment. Students interested in the program should ask a faculty or staff member to nominate them.

### ♦ ACADEMIC COURSES AND MINORS

### ♦ LEADERSHIP CONFERENCES AND WORKSHOPS

### ♦ OFF-CAMPUS MENTORING AND SHADOWING EXPERIENCES

### ♦ LEADERSHIP INTERNSHIPS

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## **An Update on the Center for Community Engagement**

*From Dr. Mark Kendrick, Director*

The Center for Community Engagement at MU helps connect our students with the Fayetteville Cumberland County area. The Center empowers students to do projects that range from making gifts for children (CE Day) in pediatric hospitals such as Cape Fear Valley Regional Medical Center and Womack Army Medical Center to projects hosted yearly by the American Marketing Association, Collegiate Chapter (AMA) that provide breakfast for the homeless utilizing the services of Operation Inasmuch. Other projects include:

- ◆ ASOM – Veteran Interview
- ◆ Community Engagement Day
- ◆ Fayetteville Area Chamber of Commerce
- ◆ Fayetteville Parks and Recreation
- ◆ Fayetteville Urban Ministry – Bus Plan
- ◆ Fayetteville Young Professionals
- ◆ Fayetteville, City & CE
- ◆ G.E.M.S. (Growing Into An Essential Member of Society)
- ◆ Grandparents Appreciation Dinner
- ◆ March of Dimes
- ◆ MLK Day of Service
- ◆ Municipal Salary Evaluations, Mayor's Office
- ◆ NC State Shave to Save
- ◆ Play4Kay Breast Cancer Awareness Event
- ◆ Red Cross Club
- ◆ Roadside Cleanup
- ◆ United Way
- ◆ Winter Wonderland

The Center for Community Engagement will launch a Community Engagement Fellows Program in the fall of 2014. More information will follow in the near future.

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## **An Update on the Center for Global Education**

*From Felicia Malissen, Director*

The Center for Global Education continues to encourage Methodist University faculty to actively participate in faculty-led programs to new places each year such as Ireland and Puerto Rico. Because of this, students have had the opportunity to go on unique trips, take different courses abroad, and encourage other students to think about it the following year. This year the Center has also provided more support to various faculty members in the hopes that new trips will be offered by different members of the faculty each upcoming year.

The Center also strives to give our students greater opportunities to participate in study abroad programs by offering more travel grants each year. The Center continues to support the offices of Study Abroad and International Programs to increase the number of trips for students and the number of international students on the MU campus. Each year, as the numbers of the international students increase, our international community becomes larger and more diverse.

The Center of Global Education fostered MU's first on campus celebration of the International Day of Tolerance with various faculty and student speakers. Some of the faculty presenters included Dr. Spencer Davis, Dr. Cristina Francescon, Dr. Josiah Baker, and Dr. Emily Leverett. Sharonda Pugh held a panel discussion with the international students on their global perspectives and matters of tolerance while studying in the U.S.

The Center was launched this day in November of 2013 to highlight that an extended encounter with a foreign culture's different values and languages can teach us how to communicate across the barriers of custom, geography, and politics. Faculty and students who have studied abroad return with a deeper understanding of other peoples, of their own cultural background, of themselves, and of their place in the world. For the future, the Center for Global Education sees international collaborations as essential. The Center aims to find partner universities that are peers and that have faculty and students who can collaborate meaningfully whether it be short or long term.

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# MONARCH REVIEW

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The Writing Center is located in Davis Memorial Library.

\* Creative literary works can be submitted to *Tapestry* magazine.





