

# ANNUAL REPORT OF UNDERGRADUATE RESEARCH FELLOWS

August, 2015 to May, 2016

## COLLEGE OF BUSINESS AND TECHNOLOGY

### **SCHOOL OF BUSINESS ADMINISTRATION**

#### **Cain, Benjamin**

**Major:**

Accounting

**Faculty Mentor:**

Johnathan Nelson

**Research/Project Title:**

A Literature Review of the Membership, Roles, and Processes of Healthcare Ethics Committees

**Project Abstract/Summary:**

The use of healthcare ethics committees (HECs) in hospitals and other healthcare settings has grown tremendously. HECs are composed of healthcare professionals as well as individuals from throughout the community, including but not limited to, teachers, clergy, and professors. The purpose of healthcare ethics committees is to provide support for healthcare professionals working to resolve ethical dilemmas (provided through ethics consultations) as well as to promote ethical infrastructures for healthcare organizations. Ethics consultations involve bringing together different perspectives to resolve ethical dilemmas. However, despite their widespread use, while we understand the purpose of practice of HECs generally, we have only limited knowledge as to what factors contribute to the success of HECs. To begin to address this gap, a literature review of HECs was conducted, with an emphasis on HEC member characteristics and processes. This presentation will provide an overview of existing knowledge on healthcare ethics committees, highlighting specific roles of HECs, procedures used in ethics consultations, who serves on HECs, and what challenges current HECs face. This research was supported by the MSU/Appalachian Health and Research Center (AHRC) Undergraduate Research Fellowship Program.

**Project Dissemination:**

Cain, B. & Nelson, J.K. (2016, April). A Literature Review of the Membership, Roles, and Processes of Healthcare Ethics Committees. Poster presented at the 2016 Annual Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

#### **Coffey, Waylan**

**Major:**

Management/Art

**Faculty Mentor:**

Janet Ratliff

**Research/Project Title:**

Why Study Abroad? Ascertainning the Value of Study Abroad Experiences and Effects of Such on Student Knowledge and Perceptions Overall.

**Project Abstract/Summary:**

A comparison of two years of travel abroad data from students taking a nine weeks course that concluded with a two week international experience in the countries studied. This study involves an evaluation of pre/post tests, surveys, and journals, looking at qualitative and quantitative data to analyze the experience on student knowledge and perceptions after being exposed to curriculum and international experience.

**Project Dissemination:**

Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

After students finishes up his BFA in Art, he will look for an internship or part-time position in arts administration. He plans to pursue a MFA after a short 3-5 year break from school.

**Davis, Tyler****Major:**

Sport Management

**Faculty Mentor:**

Steve Chen

**Research/Project Title:**

The Impact of Campus Recreation and Wellness Facility on Student Enrollment and Retention

**Project Abstract/Summary:**

In order to justify the investment of public funds for building a campus wellness center and recreation programs, this study examined the importance of the role that campus wellness center may play on students' preference in choosing their ideal institution. The respondents were 19 students (51.9% males and 47.6% females) randomly recruited in a cafeteria, classroom hallways, and quad of a regional state university in eastern Kentucky. About 32% of them actively utilize the center and provided service (at least three times per week). The results showed that students value the importance of the wellness center (M = 5.64 out of a 7-point scale) and provided programs (M = 4.74). No gender difference was found on the perceived importance of the recreation programs and the wellness facility. An overwhelmingly high level of satisfactory ratings for the current facility and service seem to justify the spending for building the facility and achieve its expected role in supporting retention. Additional interview comments and suggestions were given to help the wellness staff plan activities and improve existing services and attract prospective students.

**Project Dissemination:**

Posters at the Capitol (February, 2016)

Celebration of Student Scholarship (April, 2016)

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Pursuing a Master's degree in Sport Management. Choices of schools include: Georgia State, University of Connecticut, Georgetown University, Texas A&M, and Barry University.

**Gebka, Sydney****Major:**

Marketing

**Faculty Mentor:**

Johnathan Nelson

**Research/Project Title:**

Changing Aspects of the Nature of Work

**Project Abstract/Summary:**

Jobs are changing in regards to how they are structured and work is accomplished, affecting job satisfaction, employee-employer relationships, and employee job security. Today's organizations are characterized by increased workplace flexibility, an increase in employee diversity, and unique employee-employer work arrangements. To identify significant changes in work today, we conducted a literature review to examine the changing nature of jobs and the effects that have occurred and will occur as a result. We have highlighted four important trends. Two of these trends are freelancing and telecommuting, which involve working a series of temporary jobs and using technology to complete work from any location, respectively. We also discuss the increase in individuals holding multiple jobs. Lastly, we discuss increased employee diversity, including the growing representation of multiple generations, minorities, and a growing number of women represented in our workforce. We then discuss the implications of these trends not only for organizations, but also for individual workers and to our broader economy. By better understanding the changing nature of work, individuals and organizations can better respond to and benefit from these changes.

**Project Dissemination:**

- Gebka, S. & Nelson, J.K. (2016, February). Changing Aspects of the Nature of Work. Poster presented at the 2016 Annual Posters at the Capitol, Frankfort, KY.
- Gebka, S. & Nelson, J.K. (2016, April). Changing Aspects of the Nature of Work. Poster presented at the 2016 Annual Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.
- Nelson, J.K. & Gebka, S.M. (2016) Identifying New Organizational Practices by Considering Different Perspectives: An Ethics Management Example. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 9(1), 152-157.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Jewell, Merideth****Major:**

Sport Management

**Faculty Mentor:**

Kenneth Henderson/Steve Chen

**Research/Project Title:**

Understanding Insights for Building Effective Marketing Strategies for Women's Volleyball

**Project Abstract/Summary:**

Despite the success on the court, many women's collegiate sport programs are consistently confronted by the issues of low fan attendance, budget constraint, and unsupportive gender stereotypes. This study examined college students' perception of women's volleyball and willingness for attending the competitions. A 24-question self-created survey based on literature (Bodenner, 2015; Imbriano & Downing, 2010 Wann et al., 1999) were administered to 139 college student participants who were randomly solicited on campus or an online platform. The results indicate that volleyball is the most popular and attended female spectator athletic event. Participants' perceptions of this sport are categorized by three main factors: (1) standard motivational factor, (2) socioeconomic and geographic concern, and (3) value and time constraint. Apparently, participants with athletic participation experience have a significant higher rating on the standard motivational factor than those who were non-athletes ( $p < .05$ ). Participants who are affiliated with fraternity or sorority have a lower rating on standard motivational factor than who are not. Practical marketing strategies are drawn to promote and solicit attendance of various Greek student organizations by creating theme nights. More giveaways can be offered to reward more frequently attended and enthusiastic fans with athletic participation experience.

**Project Dissemination:**

- Posters at the Capitol (February, 2016)  
 Celebration of Student Scholarship (April, 2016)

**Awards and/or Honors:**

Certificate of Merits: Celebration of Student Scholarships (April, 2016)

**Post-Graduation Plans (Seniors only):**

N/A

**SCHOOL OF ENGINEERING AND INFORMATION SYSTEMS****Blair, Brooke****Major:**

Government

**Faculty Mentor:**

Greg McBrayer

**Research/Project Title:**

The Mystery Figures Behind Thomas Jefferson's Political Ideology

**Project Abstract/Summary:**

Thomas Jefferson one of America's leading statesmen. He was principal author of the Declaration of Independence, governor of Virginia, and the third U.S. president. Jefferson was an avid reader who enjoyed reading a wide-range of philosophical works, and the ideas he encountered in these works had a great impact on the founding of the United States. He was greatly influenced by Locke, Newton, and Bacon, and their influence on Jefferson has been

well documented. This research paper will examine the influence of other, often neglected, figures who exerted enormous influence on Jefferson's thought, including Lord Bolingbroke and the Third Earl of Shaftesbury. This research paper will examine their political and religious ideologies and provide evidence of their influence upon Jefferson.

**Project Dissemination:**

Paper was presented at the Annual Celebration of Student Scholarship.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Ms. Blair is considering graduate school or perhaps pursuing a career in education.

**Byrd, Jonathon**

**Major:**

Computer Science

**Faculty Mentor:**

Shahrokh Sani

**Research/Project Title:**

A Computer Program that Learns to Play Video Games through Experience

**Project Abstract/Summary:**

A long-standing goal in the field of artificial intelligence is to create agents that can successfully learn control policies from high-dimensional sensory inputs. Humans generally have no difficulty with basic perception and can perform simple visuomotor tasks very early in development. Machine perception however is still an active field of research and, until recently, no systems had been developed capable of end-to-end learning of non-trivial tasks directly from raw visual input. We have implemented our own open-source version of one of the first systems to achieve this goal and demonstrated its success on a variety of Atari 2600 games. Our implementation uses a modular design with many interchangeable and easily extendable parts, and contains a parallel version that increases training speed by 35%.

**Project Dissemination:**

Oral presentation in 11<sup>th</sup> Annual MSU Celebration of Student Scholarship.

**Awards and/or Honors:**

His senior thesis was noticed by a head engineer at Google and that he was offered a summer internship without applying and after all the deadlines had passed.

**Post-Graduation Plans (Seniors only):**

Accepted into Master program in Computer Science.

**Cano, Adolfo Enrique Samudio**

**Major:**

Design and Manufacturing Engineering Technology

**Faculty Mentor:**

Jorge A. Ortega Moody

**Research/Project Title:**

Integration of Software into a Laptop-Tablet to Create a Teach-Pendant for Delta Robot

**Project Abstract/Summary:**

Thanks to the help of student's, faculty, and other members of the department, Morehead State University's School of Engineering and Information Systems now has a Delta Robot as part of their robotics training team. The Delta Robot was built completely by students and faculty as part of the project. Technical training in the area of automation has always been an issue because of time constraints, high cost of the machines, and the machines vulnerability when operated by untrained personnel. Training on automation is frequently a very limited endeavor. Now that the robot is in the last stages of building and configuration, students will be able to study mechatronics of the robot as well as programming and design. The teach-pendant, commonly known as the robots contril, is a big part of the robot since it's the bridge between the programming and the execution of movement. To lower costs Dr. Ortega and his team came up with a plan of designing and creating a program in which a tablet-laptop computer can be used as a teach pendant. With the use of CAD software's a case will be design and 3D printed in which the tablet-laptop will be encased to look as a TP. This means less university cost in equipment, training, less class and instruction time, and allows for a larger number of students to be able to learn the operating procedures at a time. This project is supported with an MSU Undergraduate Research Fellowship. The design of the Teach Pendant is

now completed and in its last stages of construction and prototyping. The robot is fully functional and operational. The teach pendants computer platform is completed and programmed for every computer by other student.

**Project Dissemination:**

Exhibition(s):

Oral Presentation and Power Point

2016 Annual Morehead State University Celebration of Student Scholarship, April.

**Awards and/or Honors:**

Certificate of Exceptional Merit, Oral Presentation, Celebration of Student Scholarship, College of Business and Technology, Morehead State University, April.

**Post-Graduation Plans (Seniors only):**

N/A

**Chaudhry, Asim**

**Major:**

Engineering Technology

**Faculty Mentor:**

Ashraf Aly

**Research/Project Title:**

Website and Database Development

**Project Abstract/Summary:**

This project involves researching different aspects of website and database development, as well as creating a website. The different languages required for developing a website are explored. HTML serves as the basis of the website. JavaScript helps with any client-side scripting required for the project. All of these languages are rounded out by PHP, a server-side scripting language. PHP, for the purpose of this project, allows the programmer to link a database to the web-page. This leads to a thorough investigation between Apache and Microsoft's Internet Information Service. Apache wins out because it is an open source and is free. After having a discussion about the different kinds of databases the decision was made that SQLite should be used due to the simplicity of this DBMS. In the future if more complexity is required then switching to MySQLite shouldn't be too difficult of a task.

**Project Dissemination:**

N/A

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Childs, Lindsay**

**Major:**

Engineering Technology

**Faculty Mentor:**

Fariborz Tavangarian

**Research/Project Title:**

Fabrication of Forsterite Nanostructure Scaffolds by Multistep Sintering Method

**Project Abstract/Summary:**

Many different techniques have been developed to create bone scaffolds, but a common problem with many of these methods is that the final product lacks strength. The purpose of this research was to create a scaffold with higher strength using the bio-ceramic forsterite and the multiple step sintering method. The multiple step sintering method starts at a high temperature, and then rapidly decreases to a lower temperature where the sample is kept for an extended period of time. By using this method of sintering the strength of the material is increased, but the grain growth that occurs when the compound is held at high temperatures is decreased. In order to create these scaffolds forsterite powder was mixed with alcohol, then sponges were soaked in the solution. Once the designated amount of time had passed the samples were heated using various multiple step sintering temperature cycles. The experiment is still ongoing so the overall findings are inconclusive at this time.

**Project Dissemination:**

Since the overall project is not completed yet the research paper has not been submitted for publication.

**Awards and/or Honors:**

No awards or honors have been received.

**Post-Graduation Plans (Seniors only):**

N/A

**Cornwell, Bryant dePaul****Major:**

Chemistry

**Faculty Mentor:**

Fariborz Tavangarian

**Research/Project Title:**

Effects of ZrO<sub>2</sub> on the Microstructure, Sintering Behavior and Mechanical Properties

**Project Abstract/Summary:**

Unavailable as the research is only in the first semester, we are working hard to complete syntheses and finish collecting the results. However, papers are in the process.

**Project Dissemination:**

Not yet available.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Currently looking for jobs in Kentucky as a Chemist. Possibly reapplying for grad school for Chemical Engineering.

**Davis, Andrew W.****Major:**

Technology Management

**Faculty Mentor:**

Hans Chapman

**Research/Project Title:**

Quality Engineering Analysis of Solar Energy Data for Eastern Kentucky Region

**Project Abstract/Summary:**

The purpose of the proposed research is to utilize Quality Engineering and Management techniques to analyze Solar Energy data obtained from sources such as the Kentucky Mesonet Station in Morehead, KY.

The use of techniques in Statistical Process Control (SPC), which are widely recognized in quality Engineering and Management will provide more accurate analysis, thereby providing realistic recommendations for improvement in the Solar Energy data collection and analysis methodologies currently in use. The SPC techniques will include Pareto Charts, Cause and Effects Diagrams, Run Charts, Scatter Diagrams, Control Charts, and Process Capability Charts. MINITAB Software will be used for constructing the SPC charts and analyzing the data.

**Project Dissemination:**

\*Preparing for presentation at MSU Celebration of Student Scholarship (April 27, 2016).

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Garcia, Cody****Major:**

Engineering Management

**Faculty Mentor:**

Nilesh Joshi

**Research/Project Title:**

An Overview of Working Capital Management and Its Impact on Profitability of US Manufacturing Industry

**Project Abstract/Summary:**

Historically, a lot of research has been done on lean systems and just-in-time philosophies. But majority of these research efforts were within the realm of academia. It is imperative to examine if actual industry, particularly the manufacturing industry benefited from these developments. Ideally, the desired effect of implementing such philosophies should reflect in any firm's working capital management efficiency. In this research, we studied working capital management trends in the US manufacturing industry during the last decade. The data was

collected from financial statements of the last ten years for a sample of ten large-cap manufacturing companies in the US. The key factors calculated and used in the analysis are days sales outstanding, days inventory outstanding, payables period, cash conversion cycle, receivables turnover, inventory turnover, fixed assets turnover, and asset turnover. The two metrics: return on assets (ROA) and the return on invested capital (ROIC) are used to assess the profitability of individual companies. Multiple regression analysis is used to examine the impact of working capital management efficiency as indicated by various efficiency ratios on the profitability of individual companies as well as overall profitability of the industry.

**Project Dissemination:**

Oral Presentations:

Student, Garcia C., and Professor, Joshi N. (2016). Effect of Working Capital Management on Profitability of US Manufacturing Industry. Celebration of Student Scholarship 11<sup>th</sup> Anniversary, Morehead, KY, April.

Student, Garcia C., and Professor, Joshi N. (2015). An Overview of Working Capital Management and Its Impact on Profitability of US Manufacturing Industry. ATMAE Conference, KY, November.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Kelly, Zachary**

**Major:**

Computer Information Systems

**Faculty Mentor:**

Donna Kizzier

**Research/Project Title:**

1. Effect of Technologically-Mediated Instructional Strategies on Learning
2. DPE Research Organization/NBEA Business Casebook 2<sup>nd</sup> Edition

**Project Abstract/Summary:**

Existing Data for the GDSS in Learning study was analyzed interpreted and presented via a poster at the MSU Celebration of Student Scholarship, 4/27/2016. Plus the casebook manuscript is near completion with final touches to be accomplished this summer for a fall publication by NBEA/DBE (national organization).

Abstract of GDSS results presented on 4/27: Effectiveness of Group Decision Support Systems in Learning Environments.

Zachary A. Kelly, Dr. Donna L. McAlister Kizzier, Mentor, Department of Computer Science and Information Systems, College of Business and Technology.

Although extensive research has been conducted on the effectiveness of group decision support systems (GDSS) in business, a need existed for application for GDSS to learning. The following research questions were addressed: (1) To what extent do the decision-enhancing features of GDSS significantly affect the quality of critical thinking activities in learning environments: (2) Does the effectiveness level of the learning outcomes vary by class level and/or delivery mode? (3) What insight can be gained from the data analysis? The exploratory study assessed multiple MSU classes (n = 27) using mixed methods to achieve triangulation (correlational and qualitative methods). ANOVA results discovered significant statistical effects for four of the factors tested (high level contribution (.033), productive use of time to achieve solution (.001), highest quality solution achievement (.000), and most creative viable solution (.001), with the effectiveness of the GDSS surpassing more traditional technologically-enhanced instructional strategies.

**Project Dissemination:**

Poster presentation was accomplished at MSU, Kelly, Z. and D. Kizzier, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

Kizzier, Donna L. McAlister, Business Casebook, 2<sup>nd</sup> edition, National Business Education Association/Delta Pi Epsilon Business Honorary, Little Rock; Delta Pi Epsilon, anticipated Fall, 2016.

**Awards and/or Honors:**

Received an award for the GDSS poster presentation at MSU, April 27, 2016.

Casebook 2<sup>nd</sup> ed accomplished for publication summer 2016; Zack plus previous MSU UG fellow will be listed in the acknowledgements (they were invaluable in the management of this large and widely used publication).

**Post-Graduation Plans (Seniors only):**

Zack successfully achieved his desired post undergraduate degree position in New Jersey (Database management position).

**Quillen, Henry****Major:**

Government

**Faculty Mentor:**

Greg McBrayer

**Research/Project Title:**

Reconsidering Aristotle's Political Science

**Project Abstract/Summary:**

Although the political thought of Aristotle is among the most often-read in the world, it is almost always approached with modern, yet inappropriate methods of inquiry. Insistence on quantitative research and methodology parallel to those used in the natural sciences has led to his thought being outright rejected without proper consideration or refute. Though often unnoticed, Aristotle outlined his own methodology – which seems compellingly more appropriate for political science. Using his own methodology viz., exhaustive consideration of particular points of inquiry, yet nonetheless recognizing the limitations of a subject riddled with particulars, this presentation seeks to explore Aristotle's political thought, and to reconsider and evaluate it on his own terms. Using Aristotle's Nicomachean Ethics, Eudemian Ethics, and Politics, the presentation will investigate the four questions which Aristotle himself says the political scientist should consider, i.e. the best regime, the best regime under less than ideal circumstances, the means of stabilizing a regime, and the regime that will suit all fairly well.

**Project Dissemination:**

Paper was presented at the Annual Celebration of Student Scholarship, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Mr. Quillen is pursuing acceptance to law school upon graduation.

**Rowlett, Robbie****Major:**

Engineering Management

**Faculty Mentor:**

Hans Chapman

**Research/Project Title:**

Hydro-Mechanical to Electric Energy Converter and Generator

**Project Abstract/Summary:**

The demand for new energy sources is growing strong in Kentucky, especially in eastern Kentucky, where the coal market is failing. Alternative energy sources tend to function by turning copper wires in a turbine to produce electricity. This design proposes that instead of circular motion vertical motion can be used to direct water into the turbine and directly convert the mechanical energy of the falling water and the opposing spring directly into electrical energy.

**Project Dissemination:**

Mechanical to Electrical Energy Converter, mentor on poster presentation (Mentee: Robert Rowlett), Posters at the Capitol Conference, Frankfort, KY, February, 2016.

\*Als, preparing for presentation at MSU Celebration of Student Scholarship (April 27, 2016).

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Savage, David****Major:**

Engineering Technology/Design/Manufacturing

**Faculty Mentor:**

Jorge A. Ortega Moody

**Research/Project Title:**

Development of Delta Robot Virtually to Train Personnel

**Project Abstract/Summary:**

The project was to import CAD parts into Unity for reassembly. Once the delta robot was reassembled the importation of the control module was to be imported after construction. This could give us a software where programmers or operators can test their programs to see how they will operate and make sure the program will operate properly. The results of the project as of right now are that the robot has been built in the virtual reality and the programming to insert the control module is underway.

**Project Dissemination:**

2016 Morehead State University Research (Oral Presentation)

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Mr. Savage plans to pursue a career in the field of manufacturing with hopefully a focus on process development and kaizen implementation.

**Schell, Chase****Major:**

Electronic and Computer Engineering/Technology

**Faculty Mentor:**

Hans Chapman

**Research/Project Title:**

Quantum Efficiency of Solar Cells

**Project Abstract/Summary:**

The goal of this project was to academically study how a solar cell operates and how performance is measured. Focusing primarily on Quantum Efficiency and how a cell responds to different wavelengths. This will lead me into fall where I will conduct tests and experimentation with solar cells, and optimize solar tracking algorithms.

**Project Dissemination:**

Schell, Chase L. and Professor Sanghyun Lee. (2016, April). Quantum Efficiency of Solar Cells, poster, Celebration of Student Scholarship, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Stafford, Troy****Major:**

Engineering Technology/Manufacturing

**Faculty Mentor:**

Jorge A. Ortega Moody

**Research/Project Title:**

Design and Manufacturing a Delta-Robot for Training and Research in the Academic Field

**Project Abstract/Summary:**

Delta robots have positioned themselves in industry as a solution to tasks that require high speed and precision especially in the area of packing, inspection and assembly. Currently MSU does not have a robot of this nature which is a great limiting factor in the training of students. For this reason, the design and construction of a Delta-Robot is necessary for educational purposes. The purpose of this project is for the robot to act as the training platform for students taking classes in the department of Engineering and Technology Management in the following areas: Electronics, Control, Automation, Computer Sciences, and Mechanics. With this new development the students will have better practical training with these types of mechanisms and this will possess a broader vision of the challenges they can be expected to face in industry.

The Delta Robot is currently fully operational and working in MSU's Robot Lab.

**Project Dissemination:**

2015 – KAS Seminar (Oral Presentation)

2016 – Morehead State University Research (Oral Presentation)

**Awards and/or Honors:**

2<sup>nd</sup> place KAS Seminar Oral Presentation Contest 2015

**Post-Graduation Plans (Seniors only):**

Mr. Stafford plans to pursue a career in the field of manufacturing with hopefully a focus on automation and the further development of automation machines and processes.

**Taulbee, Ashley K.****Major:**

Government

**Faculty Mentor:**

Michael Hail

**Research/Project Title:**

Federalism and Intergovernmental Relations: Examining the Organization of the State Department of Local Government and the Relationship with Local Government Relations

**Project Abstract/Summary:**

Kentucky re-classified local governments in the last session of the General Assembly. This continues a trend whereby Kentucky has experienced several changes in governmental policies and infrastructure and how the executive branch manages local government relations. This research seeks to explore the effects of these changes and the "home rule" approach in the recent case. These will be assessed comparatively within the U.S. system of federalism.

**Project Dissemination:**

Research findings were presented at the Kentucky Political Science Association

**Awards and/or Honors:**

Won the Rifai Award at the Kentucky Political Science Association. Also received the Outstanding Government Regional Analysis Student Award

**Post-Graduation Plans (Seniors only):**

Attend graduate school in Government and Public Administration at Morehead State University.

**Woodall, Sarah Caitlin****Major:**

Government

**Faculty Mentor:**

Michael Hail

**Research/Project Title:**

Over Time: Simultaneous Progression and Dormancy in Similar Kentucky Communities

**Project Abstract/Summary:**

Within the past several decades, Kentucky has experienced several changes in governmental policies and infrastructure. These changes have led to an increase in revenue, tourism, and overall productivity in several communities, whereas other communities have remained in a state of inaction, or even seen a decline in the aforementioned areas. This research seeks to explore these differences, focusing on aspects such as staffing of local government buildings, county-wide infrastructure, and political contrasts, in an effort to determine what has encouraged the progress in some communities, and what could be changed to promote growth in struggling or inactive regions. These will be assessed comparatively within the U.S. system of federalism.

**Project Dissemination:**

Research findings were delivered for presentation at the Annual Celebration of Student Scholarship.

**Awards and/or Honors:**

Outstanding Undergraduate Government Student.

**Post-Graduation Plans (Seniors only):**

N/A

# **CAUDILL COLLEGE OF ARTS, HUMANITIES, AND SOCIAL SCIENCES**

## ***DEPARTMENT OF ART AND DESIGN***

### **Bauman, Stephanie**

**Major:**

Animal Science

**Faculty Mentor:**

Joy Gritton

**Research/Project Title:**

Getting Hands-On With Our Food: Gardening for the Children at the Haldeman Community Center After School Program

**Project Abstract/Summary:**

Gardening is an enriching experience for children that allows them to reconnect with their food and see their hard work progress into a living plant that provides food and happiness. The project entailed establishing raised garden beds at the Haldeman Community Center for the children who attend their after school program. The beds were located in the area of the old school. The goal was to allow the children to have hands-on experience and constructive instruction in gardening, as well as bring new life to the old school area.

The Haldeman After School Program offers safe, child-centered, nurturing enrichment activities for elementary students Monday through Thursday during the months of September, October, March, and April at the Haldeman Community Center. Participating children enjoy physical games, a nutritious snack, planned learning activities, tutoring, and help with their homework (with reading and math being a primary focus).

The Haldeman Community Center's mission is to provide a place for those in the community to meet for fellowship, to provide children with a safe haven away from drugs, to foster the dramatic and musical arts, by providing a place for their practice and performance and to help sustain and enhance the year-round economic, educational, recreational and social well being of the community's residents.

**Project Dissemination:**

Bauman, Stephanie and Jamee Rogers. Creating Raised Gardens for the Haldeman Community Center After School Program: a Guide for Other After School Programs, Posters at the Capitol, Frankfort, KY, February.

Bauman, Stephanie and Jamee Rogers. Creating Raised Gardens for the Haldeman Community Center After School Program: A Guide for Other After School Programs, Appalachian Studies Association annual conference, Shepherdstown, West Virginia, March.

Bauman, Stephanie. Creating Raised Gardens for Children on a Budget: A Guide for Community Based Programs, Celebration of Student Scholarship, Morehead State University, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

### **Busby, Kristin**

**Major:**

Studio Art

**Faculty Mentor:**

Jennifer Reis

**Research/Project Title:**

ArtWorks: Managing Visual Arts Programming in Nonprofit Gallery Environment

**Project Abstract/Summary:**

This project involved aspects of professional arts programming management; including exhibition logistics and design; special events and hospitality; art programming for educational and cultural purposes (artist lectures, workshops, forums, art sales); and marketing/public relations for all gallery programming. 2016 arts programming includes the annual art faculty exhibition; three student art exhibitions (high school, MSU sophomore, MSU senior); and a regional summer exhibition specific to contemporary art from Kentucky. Ms. Busby spend a significant amount of time with the management and communication involved with the summer exhibition, the Bluegrass Biennial, including initial submission opportunity mailings, creation and management of submission jurying information, communication with selected and rejected artists, and other administrative tasks associated with the logistics of

managing a large scale juried exhibition. She also developed a social media strategy for the gallery appropriate for the type of staff appropriate for the Claypool-Young Art Gallery.

**Project Dissemination:**

Exhibitions and programming have been presented in the Claypool-Young Gallery and Strider Gallery in the Claypool-Young Art Gallery serving a local and regional audience. Special events took place during each exhibit including opening receptions and visiting artists. Publicity was published at the local and regional levels. Ms. Busby presented at the spring MSU Showcase of Student Scholarship.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Davis, Adam**

**Major:**

Art

**Faculty Mentor:**

Jennifer Reis

**Research/Project Title:**

The Art of Exhibitions and Collection Management

**Project Abstract/Summary:**

The Undergraduate Fellowship in Exhibitions and Collections Management focuses on the logistical planning and administration of arts programming as well as collection management. Working within the arts programming hosted by the Claypool-Young Art Gallery, UR Fellow Adam Davis was involved with the coordination and management of art events during the 2015-16 academic year, including art handling, receiving, label creation, and installation with seven exhibitions. Outside of the gallery, he focused on collection management specifically with work on the University Art Collection Inventory Project, including photographic, narrative and numeric documentation of works in the collection. Additionally, he was involved with hosting evening and weekend events, as well as programming documentation for gallery promotion and assessment. This fellowship is designed to prepare a student to begin a career in arts administration or to pursue a degree in arts administration or museum studies, or an MFA in studio art. This project is supported by the Undergraduate Fellowship Program, the Department of Art and Design, and the Caudill College of Arts, Humanities, and Social Sciences.

**Project Dissemination:**

Exhibitions and programming have been presented in the Claypool-Young Gallery and Strider Gallery in the Claypool-Young Art Gallery serving a local and regional audience. Special events took place during each exhibit including opening receptions and visiting artists. Publicity was published at local and regional levels. Mr. Davis presented at the spring MSU Showcase of Student Scholarship.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Dotson, Elizabeth**

**Major:**

Art Education/Music

**Faculty Mentor:**

Joy Gritton

**Research/Project Title:**

Connecting Past to Present through children's Music

**Project Abstract/Summary:**

Throughout history, children have grown up listening to and performing music, from folk music on the front porch to radio and live performances. Songs pass from generation to generation and everyone has songs they remember from their youth. The Haldeman Community Center after school program offers music one day a week as part of their enrichment activities. MSU student instructors experimented with a variety of instruments and music education strategies (such as using story characters to learn rhythm) in order to build foundational skills and expand the children's musical experiences. Over the Fall (2015) and Spring (2016) semesters music education students worked

to expose the children to Haldeman's rich heritage of music by collecting and sharing oral histories, teaching songs popular in the past, and having the children perform with senior musicians.

The Haldeman After School Program offers a safe, child-centered, nurturing after school enrichment program for elementary students Monday through Thursday during the months of March, April, September, and October at the Haldeman Community Center. Participating children enjoy physical activities, a nutritious snack, a planned learning activity, and help with their homework and tutoring.

**Project Dissemination:**

Dotson, Elizabeth, Charlie Day, and Jasmine Wheeler, Connecting Past with Present through Children's Music, Posters at the Capitol, Frankfort, KY, February.

Dotson, Elizabeth, Charlie Day, and Jasmine Wheeler, The Haldeman Community Center After School Program: Connecting Past with Present Through Children's Music, (poster) Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Guffey, Sydney**

**Major:**

Exercise Science

**Faculty Mentor:**

Joy Gritton

**Research/Project Title:**

Kids on the Move at Haldeman Community Center

**Project Abstract/Summary:**

This project encompassed identifying, planning, and leading a variety of physical activities for children grades K-5<sup>th</sup> participating in the Haldeman Community Center after school program. The goals were to encourage cooperation and collaboration, foster healthy lifestyle habits, and provide positive and safe alternatives to negative peer pressure.

The Haldeman After School Program offers a safe, child-centered, nurturing after school enrichment program for elementary students Monday through Thursday during the months of March, April, September, and October at the Haldeman Community Center. Participating children enjoy physical activities, a nutritious snack, a planned learning activity, and help with their homework and tutoring.

The Haldeman Community Center's mission is to provide a place for those in the community to meet for fellowship, to provide children with a safe haven away from drugs, to foster the dramatic and musical arts by providing a place for their practice and performance and to help sustain and enhance the year-round economic, educational, recreational and social well being of the community's residents.

**Project Dissemination:**

Guffey, Sydney. Envisioning a Healthier Region: Diversity in Physical Education, Posters at the Capitol, Frankfort, KY, February.

Guffey, Sydney. Envisioning a Healthier Region: Diversity in Physical Education, Appalachian Research Symposium and Arts Showcase, University of Kentucky, Lexington, March.

Guffey, Sydney. Envisioning a Healthier Region: Diversity in Physical Education, Appalachian Studies Association annual conference, Shepherdstown, WV, March.

Guffey, Sydney. Promoting Health and Wellness in Appalachian Youth, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Guffey plans to enroll in a physical therapy program and hopes to make the larger community aware of the lessons she has learned through her work at Haldeman.

## **Helton, Julieann**

### **Major:**

Art Education

### **Faculty Mentor:**

Joy Gritton

### **Research/Project Title:**

Designing on a Dime: Creating a Virtual Presence for Non-Profit Organizations

### **Project Abstract/Summary:**

This project represents the last chapter of a three-year long collaboration with the Haldeman Community Center. The current work was an extension of a public relations campaign and website created for the Haldeman After School Program over the past two years. The goal was to transfer the website to a platform that allowed Haldeman Community Center board members to maintain it without reliance on a third-party web designer. Research was conducted to determine the best web hosting and online web building software provider(s). The one that was ultimately chosen offered ease of use, ample server storage space, and affordable prices for a non-profit. The website was successfully transferred and expanded. The last component of this project involved a series of workshops to train the co-coordinators of the Haldeman After School Program to effectively use the provider's web building software. The project concluded with the official re-launch of haldemancommunitycenter.org, which will be utilized for further community awareness and support.

The Haldeman After School Program offers a safe, child-centered, nurturing after school enrichment program for elementary students Monday through Thursday during the months of March, April, September, and October at the Haldeman Community Center. Participating children enjoy physical activities, a nutritious snack, a planned learning activity, and help with their homework and tutoring.

The Haldeman Community Center's mission is to provide a place for those in the community to meet for fellowship, to provide children with a safe haven away from drugs, to foster the dramatic and musical arts, by providing a place for their practice and performance and to help sustain and enhance the year-round economic, educational, recreational and social well being of the community's residents. They are located at 4399 Open Fork Road.

### **Project Dissemination:**

Helton, Julieann and Gritton, Joy (2016, February). Designing on a Dime: Creating a Virtual Presence for Non-Profit Organizations, presentation, Posters-at-the-Capitol, Frankfort, KY, February.

Helton, Julieann and Gritton, Joy (2016, March). Designing on a Dime: Creating a Virtual Presence for Non-Profit Organizations, presentation, Appalachian Research Symposium and Arts Showcase, University of Kentucky, Lexington, KY, March.

Helton, Julieann and Gritton, Joy (2016). Designing on a Dime: Creating a Virtual Presence for Non-Profit organizations, presentation, Appalachian Studies Association Conference, Shepherdsville, WV, March.

Helton, Julieann. The Haldeman After School Program Student Leadership Team: Rural Service Learning in Underserved Communities. Gulf-South Summit Conference, Savannah, GA, April.

Helton, Julieann and Gritton, Joy (2015). Designing on a Dime: Creating a Virtual Presence for Non-Profit Organizations, presentation, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

This project has also been disseminated in the form of a website itself, which promotes Haldeman Community Center events and programming and keeps community members informed about resources in their area.

### **Awards and/or Honors:**

Outstanding Sophomore Award for the Department of Art and Design.

2016 Outstanding Undergraduate Student for the Department of Art and Design.

Certificate of Merit for oral presentation at MSU's Celebration of Student Scholars, 2015.

### **Post-Graduation Plans (Seniors only):**

Julieann Helton plans to pursue a career in graphic design and marketing. Due to her experience working with non-profit organizations, she will likely channel her design skills and training toward this area of employment.

## **Holbrook, Heather**

### **Major:**

Art Education

### **Faculty Mentor:**

Joy Gritton

### **Research/Project Title:**

Art After Hours: Appalachian Art in the Classroom

**Project Abstract/Summary:**

This project will focus on building social literacy skills for children participating in the Haldeman After School Program through using the visual arts to explore the history and traditions of their community. These skills will be developed through a variety of art projects throughout the year that will be completed in collaboration with the music and theater activities offered by the program. Through these experiences and the knowledge that the children gain, they will learn to appreciate their heritage, improve their sense of self, and foster their creativity.

The Haldeman After School Program offers a safe, child-centered, nurturing after school enrichment program for elementary students Monday through Thursday during the months of March, April, September, and October at the Haldeman Community Center. Participating children enjoy physical activities, a nutritious snack, a planned learning activity, and help with their homework and tutoring.

The Haldeman Community Center's mission is to provide a place for those in the community to meet for fellowship, to provide children with a safe haven away from drugs, to foster the dramatic and musical arts, by providing a place for their practice and performance and to help sustain and enhance the year-round economic, educational, recreational, and social well being of the community's residents.

Through this project, the students have shown greater enthusiasm for living in Appalachia and greater appreciation for what the Appalachian people have done and can do. The student's self-esteem improved greatly from beginning of the year to the end of the year as well.

**Project Dissemination:**

Holbrook, Heather (2015). Art After Hours: Appalachian Art in the Classroom, oral presentation, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Currently putting applications out for Art teaching positions in P-12 public schools.

**Holmes, Marilyn****Major:**

Art/Psychology

**Faculty Mentor:**

Elizabeth Mesa-Gaido

**Research/Project Title:**

Inscape, a Collaborative, Inter-Disciplinary, Student-Centered Journal: Six Decades of Publishing Creative Productions at MSU

**Project Abstract/Summary:**

Original Abstract: This project explores the development of MSU's Inscape publication, from its inception in 1957 by The Writers' Club at Morehead State College through to the present, in anticipation of its 60<sup>th</sup> year anniversary in 2017. Emphasis of research will be to document this student-centered (editors and contributors), literary and visual arts journal utilizing the CCL archival, special collection. This project will (1) trace Inscape's history, including its initial development and changes over the years, as well as the title's origin and awards received (Kentucky Arts Commission and either an NEA or NEH around 1974); (2) document the contributions of artists, designers, and writers (including NPR Morning Edition host Steve Inskeep in the 1990 issue) over six decades, as well as MSU departments, faculty and staff support of the dissemination of students' creative productions; and (3) analyze design, art, media and publishing trends over a sixty-year period.

Abstract for 2016 Oral Presentation: In order to preserve the history of MSU's art and literary achievements, the present project focused on the proper care and handling of delicate archival documents in collaboration with the Department of Art & Design, the English Department, and the Library Special Collections and Archives. This study sought to find the best possible method for preserving the publications in a contemporary digital format to make them available to the masses. This also served to create a working record of missing or damaged editions of Inscape dating back to 1957. Along with the documentation, the researchers uploaded to and maintained the online Scholar Works archive, where these documents would be made readily accessible through download.

**Project Dissemination:**

Student, Marilyn H. (2016, April). The Care Documentation, and Preservation of Literary and Artistic Works through the Inscape Art and Literary Magazine, oral presentation, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

ScholarWorks: [http://scholarworks.moreheadstate.edu/inscape\\_magazine\\_archive/](http://scholarworks.moreheadstate.edu/inscape_magazine_archive/)

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Hunt, Nick****Major:**

Art

**Faculty Mentor:**

Seth Green

**Research/Project Title:**

Glazing Station Building and Development

**Project Abstract/Summary:**

This project includes the building and development of two new glazing stations in the Ceramics Lab here at MSU.

Glaze sample tiles were produced and displayed in the new glazing areas for instructional use for both students and faculty.

Under the direction of Mr. Green, Mr. Hunt performed the following tasks: mixed studio slips, and glazes; and loaded and fired electric and gas kilns.

**Project Dissemination:**

Poster presentation at the Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

Award of Merit

**Post-Graduation Plans (Seniors only):**

N/A

**Lewis, Gabriel****Major:**

Art

**Faculty Mentor:**

Seth Green

**Research/Project Title:**

Empty Bowls for Rowan County Christmas

**Project Abstract/Summary:**

Organized and executed one Empty Bowls fund raiser in the Spring 2016 to benefit Rowan County Christmas. Steps leading up to the event consisted of: contacting community partners (Rowan County Art Center), setting dates and specifics for the events, soliciting, local businesses for donations of food, utensils, etc., planning bowl-making sessions (Bowl-a-thon), organizing community awareness of the project through advertising in multiple media outlets, and assisting Seth Green and other MSU students in hosting the events.

**Project Dissemination:**

PowerPoint presentation at the Celebration of Student Scholarship in April 2016.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Madden, Tara****Major:**

Studio Art/Spanish

**Faculty Mentor:**

Jennifer Reis

**Research/Project Title:**

ArtWorks: Visual Arts Programming, Products, and Promotion in Non-Profit and For-Profit Contexts

**Project Abstract/Summary:**

The project involved aspects of professional arts programming management; including exhibition logistics and design; special events and hospitality; art programming for educational and cultural purposes (artist lectures, workshops, forums, art sales); and marketing/public relations for all gallery programming. Fall 2015 arts programming included national juried and group exhibitions and a regional summer exhibition specific to contemporary textile art from SC regional (Stitch). Ms. Madden was involved in planning and organization of student-focused arts activities like the annual Halloween Costume Contest and Rock Horror Picture Show Screening, and worked in tandem with Maria Blevins on the management and promotion of the fourth annual MSU-student Craft Bizarre (which resulted in over \$4,000 in student art and craft sales in 2015).

**Project Dissemination:**

Exhibitions and programming have been presented in the Claypool-Young Gallery and Strider Gallery in the Claypool-Young Art Gallery serving a local and regional audience. Special events took place during each exhibit including opening receptions and visiting artists. Publicity and exhibit reviews will be at the local and regional levels.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Maness, Simon****Major:**

Art

**Faculty Mentor:**

Elizabeth Mesa-Gaido

**Research/Project Title:**

Inscape, a Collaborative, Inter-Disciplinary, Student-Centered Journal: Six Decades of Publishing Creative Productions at MSU

**Project Abstract/Summary:**

Original Abstract: this project explores the development of MSU's Inscape publication, from its inception in 1957 by The Writers' Club at Morehead State College through to the present, in anticipation of its 60<sup>th</sup> year anniversary in 2017. Emphasis of research will be to document this student-centered (editors and contributors), literary and visual arts journal utilizing the CCL archival, special collection. This project will (1) trace Inscape's history, including its initial development and changes over the years, as well as the title's origin and awards received (Kentucky Arts Commission and either an NEA or NEH around 1974); (2) document the contributions of artists designers and writers (including NPR Morning Edition host Steve Inskeep in the 1990 issue) over six decades, as well as MSU departments, faculty and staff support of the dissemination of students' creative productions; and (3) analyze design, art, media, and publishing trends over a sixty-year period.

Abstract for 2016 Poster Presentation: Since the inception of the publication Inscape in the year 1957, the magazine has undergone many progressions and changes over the last fifty-nine years. The 60<sup>th</sup> anniversary of Inscape is approaching in 2017, and in honor of such an occasion, a complete digital archive of every issue became a vision and a goal for this project. The primary emphasis of this project is to trace the history of Inscape, its origins and the meaning of its titular name, analyze the designs, media, art, and publishing trends over the vast timeline of Inscape, document the writers, editors, artists and all other individuals, students and faculty alike, who contributed greatly to the life of this magazine, and finally to show MSU's continued interest in investing in the creativity and creative productions of students.

**Project Dissemination:**

Maness, Simon (2016, April). Inscape, A Collaborative, Inter-Disciplinary, Student-Centered Journal: Six Decades of Publishing Creative Productions at MSU, poster, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

ScholarWorks: [http://scholarworks.moreheadstate.edu/inscape\\_magazine\\_archive/](http://scholarworks.moreheadstate.edu/inscape_magazine_archive/)

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

## **Smith, Kyle**

### **Major:**

Nursing

### **Faculty Mentor:**

Joy Gritton

### **Research/Project Title:**

A Lifetime of Healthy Living: Promoting Wellness among Youth in Appalachia's Diverse Communities

### **Project Abstract/Summary:**

The health and well being of individuals are greatly impacted by the level of understanding of the human body they possess. The easiest way to promote health lifestyles is through proper education about the human body and how making healthy choices will positively affect the body. This project entailed implementing a primary prevention program with the children attending the Haldeman Community Center after school program. Information, demonstrations, and activities were presented in a way so as to increase an overall awareness of general health and foster proper diet, exercise, and lifestyle choices and modifications.

The Haldeman After School Program offers safe, child-centered, nurturing enrichment activities for elementary students Monday through Thursday during the months of September, October, March, and April at the Haldeman Community Center. Participating children enjoy physical games, a nutritious snack, planned learning activities, tutoring, and help with their homework.

The Haldeman Community Center's mission is to provide a place for those in the community to meet for fellowship, to provide children with a safe haven away from drugs, to foster the dramatic and musical arts, by providing a place for their practice and performance and to help sustain and enhance the year-round economic, educational, recreational, and social well being of the community's residents. They are located at 4399 Open Fork Road.

### **Project Dissemination:**

Smith, Kyle. A Lifetime of Healthy Living: Unifying Awareness of Healthy Living Among Appalachia's Diversified Community, Posters at the Capitol, Frankfort, KY, February.

Smith, Kyle. A Lifetime of Healthy Living: Promoting Wellness among Youth in Appalachian's Diverse Communities, (poster) Celebration of Student Scholarship, Morehead State University, March, 2016.

### **Awards and/or Honors:**

N/A

### **Post-Graduation Plans (Seniors only):**

N/A

## ***DEPARTMENT OF COMMUNICATION, MEDIA, AND LANGUAGES***

## **Nichols, Anna**

### **Major:**

Convergent Media

### **Faculty Mentor:**

Ann Andaloro

### **Research/Project Title:**

Hostess and Assistant Producer for Hear Me Roar: The Lives and Issues of Modern Women A Bi-Monthly Television Program on MSU-TV

### **Project Abstract/Summary:**

Anna Nichols helped produce and write MSU television program segments for Hear Me Roar. In this position she was mentored as a television producer, writer, and hostess.

### **Project Dissemination:**

The programming that Anna helped produce and write aired on MSU-TV during the Spring 2016 and Fall 2015 semesters. Hear Me Roar is available to unlimited potential viewers online through MSU's website. The program provides the audience an opportunity to gain a broader understanding of issues important to women. She presented a panel on traditional music for the Kentucky Communication Association Conference in fall of 2015. She gave an oral presentation at the Celebration of Student Scholarship.

### **Awards and/or Honors:**

Anna received a first place award in writing for the MSU Gender Studies Program Judy Rodgers Contest for a story presented on MSU TV Hear Me Roar.

### **Post-Graduation Plans (Seniors only):**

N/A

**Blevins, John Tanner****Major:**

Convergent Media

**Faculty Mentor:**

Steven Middleton

**Research/Project Title:**

Far Above the Rolling Campus: A Documented History of Morehead State University

**Project Abstract/Summary:**

Far Above the Rolling Campus is a full-length feature documentary created based off of the writings of Dr. Donald F. Flatt in his book, A Light to the Mountains. The project has been in progress for over a year and has required research, travel and countless hours of hard work to get to the point of near completion, which is where the project stands currently. I not only served a producer role in the project, but was also asked to take on the job of Director of Photography, and camera operator, along with co-editor. These positions entailed not only running camera, but being in charge of lighting, helping with shot composition, delving through footage, compiling footage and photographs into a cohesive movie, converting archival films and tapes, cleaning and editing scanned archival photos and creating visually pleasing graphic effects to enhance the viewing quality of the film. Along with these duties, I was also asked to research into the history myself to make sure the project was cohesive and depicted the true history, and also to maintain good interviews with our featured experts.

**Project Dissemination:**

The film will be premiered both internally, and externally.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Student will graduate in the Fall of 2016.

**Floccare, Leah****Major:**

Convergent Media

**Faculty Mentor:**

Jeffrey Hill

**Research/Project Title:**

Animation: A Brief History

**Project Abstract/Summary:**

Animation: A Brief History will explore animation from its origins to the present day. While at first blush, a seemingly enormous task, it is and will be a manageable project. Starting from the early 1900's to the current day, the project will allow the student to explore animation worldwide while focusing on American animation.

**Project Dissemination:**

Student presented at the Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Work in the production industry.

**Holbert, Christina****Major:**

Convergent Media

**Faculty Mentor:**

Ann Andaloro

**Research/Project Title:**

Producer for Hear Me Roar: The Lives and Issues of Modern Women a Bi-Monthly Television Program on MSU-TV

**Project Abstract/Summary:**

Christina Holbert helped produce and write MSU television program segments for Hear Me Roar. In this position she was mentored as a television producer and writer.

**Project Dissemination:**

The programming that Christine helped produce and write was aired on MSU-TV during the Spring 2016 and Fall 2015 semesters. Hear Me Roar is available to unlimited potential viewers online through MSU's website. The program provides the audience an opportunity to gain a broader understanding of issues important to women. We presented a panel on women in traditional music for the Kentucky Communication Association Conference in fall of 2015. She gave an oral presentation at the Celebration of Student Scholarship.

**Awards and/or Honors:**

Christina received the MSU Gender Studies Program Judy Rodgers first place award for writing of a story presented on Hear Me Roar for MSU-TV.

**Post-Graduation Plans (Seniors only):**

N/A

**Huang, Lin****Major:**

Art/Neuroscience/Computer Science

**Faculty Mentor:**

Ann Andaloro

**Research/Project Title:**

Hostess and Assistant Producer for Hear Me Roar: The Lives and Issues of Modern Women a Bi-Monthly Television Program on MSU-TV

**Project Abstract/Summary:**

Lin helped produce and write MSU television program segments for Her Me Roar. In this position she was mentored as a television producer, writer, and hostess.

**Project Dissemination:**

The programming that Lin helped produce and write was aired on MSU-TV during the Spring 2016 semester. Hear Me Roar is available to unlimited potential viewers online through MSU's website. The program provides the audience an opportunity to gain a broader understanding of issues important to women.

1. Poster at the Capitol is an annual event to celebrate the research, scholarly, and creative experiences of undergraduate students at Kentucky's public institutions. This is a poster presentation.
2. University of Louisville – Kentucky Honors Roundtable: This is Gendercide. Together, We Can Break This Cycle (February 2016)  
The Kentucky Honors Roundtable is a fulfilling event that happens once a semester to bring together all the students in the Honors Program/College from multiple different universities.  
This is an oral presentation
3. MSU Celebration of Student Scholarship (April 2016). Morehead State University's recognition of Undergrad research fellows. This is an oral presentation.
4. Give Her Life: Commission Artist (December 2015). This is an exhibition in North Hollywood, California.

**Awards and/or Honors:**

Lin won the MSU Judy Rodgers Art award for Art she created for Hear Me Roar.

Lin also won the American Association of University Women (AAUW) Cave Run Branch Scholarship Recipient 2016.

**Post-Graduation Plans (Seniors only):**

N/A

**Keating, Sarah****Major:**

Spanish/Psychology

**Faculty Mentor:**

Philip Krummrich

**Research/Project Title:**

Supplements for Spanish: Second Language Acquisition through Technology

**Project Abstract/Summary:**

Accessibility to endless online resources has created an opportunity for second language learners to improve their language skills outside of their coursework. A search for the best supplementary material available to Spanish language students was conducted to filter through this technology. The resources were reviewed based upon their potential to improve the language skills of students at beginner and intermediate levels. The following components of language proficiency were considered during the resource search: listening skills, writing skills, speaking skills,

vocabulary knowledge, and grammar knowledge. After this initial investigation, a study was conducted in which a pool of MSU students evaluated the resources based upon their personal preferences and understandings of the quality of the materials. The final product of this research is a guide of websites and mobile applications that can be used as additional learning tools for students' Spanish language studies. This research was funded with the Honors Scholarship through an Undergraduate Research Fellowship.

**Project Dissemination:**

Keating, Sarah and Halon, Alyssa. (2016, April) Supplements for Spanish: Second Language Acquisition through Technology, poster, Celebration of student Scholarship, Morehead, KY, April.

This presentation was not given during the Celebration of Student Scholarship due to a family emergency.)

The written guide will be shared with language faculty throughout the region.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Plans to enter a school psychology program after graduation.

**Turner, Chris**

**Major:**

Convergent Media

**Faculty Mentor:**

Jeffrey Hill

**Research/Project Title:**

Autism Spectrum

**Project Abstract/Summary:**

Autism is an affliction which has a wide range of possible outcomes; it can yield an individual highly functional or one who is virtually catatonic. This project will explore those ranges through interviews with autistic individuals (including Mr. Turner's brother), as well as doctors, caregivers, and family members. The project is slated to be a 25 to 28 minute documentary, so as to fit within a 30-minute broadcast time slot.

**Project Dissemination:**

Student presented at the Celebration of Student Scholarship, Morehead State University, Morehead, KY, April. KET broadcast pending.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

The student is hoping to pursue a MFA in media production.

**Wile, Cailin**

**Major:**

English

**Faculty Mentor:**

Philip Krummrich

**Research/Project Title:**

Translating Poetry of African Women from French into English

**Project Abstract/Summary:**

This project was meant to bring unknown works by French-African women into the light, and it resulted in the translation of one entire book, as well as contact with the authors, who gave her permission for me to publish the translation.

**Project Dissemination:**

Presented at Kentucky Honors Roundtable at the University of Louisville in 2016.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Wilkerson, Kathrine****Major:**

Biomedical Science/Pre-Dentistry

**Faculty Mentor:**

Ann Andaloro

**Research/Project Title:**

Hostess and Assistant Producer for Hear Me Roar: The Lives and Issues of Modern Women a Bi-Monthly Television Program on MSU-TV

**Project Abstract/Summary:**

Kathrine helped produce and write the MSU television program Hear Me Roar. The job involved booking guests, conducting research, developing interview questions. In addition, she created, wrote and produced content for video segments. In this position, she was mentored as a television producer, writer, and feminist activist. She hosted a spotlight segment on Women and Health.

**Project Dissemination:**

The programming that Kathrine helped produce and write was aired on MSU-TV during the Spring 2016 semester. Hear Me Roar is available to unlimited potential viewers online through MSU's website. The program provides the audience an opportunity to gain a broader understanding of issues important to women. She presented her work at Posters-at-the-Capitol and the Celebration of Student Scholarship.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

***DEPARTMENT OF ENGLISH*****Phillips, Chanel****Major:**

English/Secondary Education

**Faculty Mentor:**

Alison Hruby

**Research/Project Title:**

Culturally Responsive Teaching in Rural Appalachia: What Language Diversity and Youth Culture Mean for Teaching the Language Arts in Rurally Situated High Schools

**Project Abstract/Summary:**

The project is a Literature Review of research on youth culture and the discourse patterns of rural Appalachian citizens, the end goal being to help high school English teachers working in eastern Kentucky to design culturally responsive literacy instruction that builds on students' youth and regional cultures.

**Project Dissemination:**

Ms. Phillips only worked one week on the project. The project is now on hold until the 2017-18 school year, when I anticipate being finished with the several other projects I have going on for the present and the 2016-17 year.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Ms. Phillips is presently applying for teaching jobs in secondary Education.

**Stiles, Lindsey****Major:**

English/Secondary Education

**Faculty Mentor:**

Alison Hruby

**Research/Project Title:**

Culturally Responsive Teaching in Rural Appalachia: What Language Diversity and Youth Culture Mean for Teaching the Language Arts in Rurally Situated High Schools (revised later to be Creating a Sustainable Classroom Library for Reluctant Readers: A Visual-Media, Learning Commons Approach)

**Project Abstract/Summary:**

Classroom libraries are essential to promoting interest in reading. Research shows a strong correlation between an abundant availability of classroom books and students' above-average reading achievement. However, students are often mercurial about book selections. My co-researchers and I have found that many students show little interest in the texts that students loved to read the previous year, making the management of classroom libraries difficult and expensive. To alleviate this issue, we found several strategies that teachers can use to build sustainable, appealing classroom libraries that enrich students' learning experience. School libraries, in general, are undergoing changes to accommodate the practice of twenty-first century readers, shifting from large storage rooms that house materials for research and pleasure reading to spaces in which students "experiment, create, and explore." By incorporating the role of students' multimedia use in their reading lives, we aimed to foster student creativity, experimentation, and exploration in one classroom library.

**Project Dissemination:**

The manuscript of the study is presently in review at *Kentucky English Bulletin*.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Ms. Stiles is completing Clinical Practice in English/Secondary Education and applying for teaching jobs.

## ***DEPARTMENT OF HISTORY, PHILOSOPHY, INTERNATIONAL AND LEGAL STUDIES***

**Dean, Jonathan****Major:**

History

**Faculty Mentor:**

Alana Scott

**Research/Project Title:**

Perspectives of Alfred: Evaluating Historical Interpretations of England's First Monarch

**Project Abstract/Summary:**

Alfred is Called "The Great" due to his exploits as recorded in Asser's *The Life of King Alfred* and by the medieval scholar Geoffrey of Monmouth, but modern scholars such as Jacob Abbott postulate that much of his "greatness" has been exaggerated. Jonathan examined basic monographs of the period to gain an understanding of the context of early medieval England, then read relevant primary sources (beginning with Asser's *Life of Alfred the Great* and the *Anglo-Saxon Chronicle*) and secondary sources (such as Jacob Abbot's *Life of Alfred the Great*) to begin his focus on Alfred the Great. He completed three annotated bibliographies of his sources during the Fall 2015 semester, one on the primary sources, one on the secondary sources, and one on the archaeological reports (which usually blend both kinds of sources). He completed a research proposal for a conference-length paper in January of 2016, and presented his conference-length paper at the Celebration of Student Scholarship in April 2016. During the Fall 2015 Jonathan was working as an Honors student on this project and began work as a more traditional UGF Fellow in January 16.

**Project Dissemination:**

The research resulted in a conference-length research paper. For this first paper incarnation Jonathan submitted a research proposal to the Regional Undergraduate Symposium in Interdisciplinary Studies at Lynchburg, Virginia, for April 1-3 but the proposal was not accepted. He did present the conference paper at the Celebration of Student Scholarship (by memory, I would like to add) and was awarded the Certificate of Merit for Caudill College of Humanities oral presentations. He plans to extend the conference paper to an article-length manuscript for submission to an undergraduate journal and still plans to present the conference paper at a history conference in the Spring 2017.

**Awards and/or Honors:**

Jonathan was awarded the certificate of merit for his oral presentation at the Celebration of Student Scholarship.

**Post-Graduation Plans (Seniors only):**

He's only a sophomore. It's amazing.

## **Dorn, Johnna**

### **Major:**

History

### **Faculty Mentor:**

Benjamin Fitzpatrick

### **Research/Project Title:**

Fighting Racial Violence in Kentucky: The Anti-lynching Movement, 1890-1930

### **Project Abstract/Summary:**

During the Civil War, most Kentuckians thought that compromising over slavery would solve the issue more successfully than war. However, after the war, the state's sentiment shifted towards the Confederacy. This change revealed itself through widespread racial violence. In the late 1800s, the National Association for the Advancement of Colored People (NAACP), and other organizations in Kentucky, led an anti-lynching campaign. These organizations successfully encouraged officials to pass new anti-lynching laws in 1897 and 1920. Although this movement has not been given much attention, the efforts of these groups successfully reduced lynchings and lessened racial violence in the state by 1930. Without the work of these organizations, lynchings and the perpetrators of these crimes would have continued to go unpunished in Kentucky. This research was supported by MSU Undergraduate Research Fellowship.

### **Project Dissemination:**

Dorn, Johnna (2016, April). Fighting Racial Violence in Kentucky: The Anti-lynching Movement, 1890-1930, poster presentation, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

### **Awards and/or Honors:**

N/A

### **Post-Graduation Plans (Seniors only):**

N/A

## **Long, Erin**

### **Major:**

Art Education/ Theatre Education

### **Faculty Mentor:**

Jason Holcomb

### **Research/Project Title:**

Campbell Farming Corporation, Crow Indian Reservation, and a Big Horn County, Montana Story Map

### **Project Abstract/Summary:**

This research project is based on records of Campbell Farming Corporation of Hardin, MT., obtained from archives in Helena, MT. Montana Farming Corporation was founded by Thomas D. Campbell in 1918 during World War 1 and financed by J.P. Morgan after Campbell proposed the idea to President Wilson. Montana Farming Corporation originally included land on two Montana Indian reservations and later became Campbell Farming Corporation, with only the land on the Crow Indian Reservation. The farming venture added thousands of acres of wheat production to the war effort and operated until 1975. At its largest the farm was 95,000 acres on the Crow Reservation in Big Horn County, MT. Its location on the Crow Reservation became part of a complex agricultural landscape by nature of the land tenure situation on Indian reservations. Mr. Campbell was an engineer by training and also served in the military. Because of his experience with large-scale agriculture he was invited to the Soviet Union to advise them on their Five Year Plans. Archival documents, photographs from the Big Horn County Historical Museum, and other historical documents were used to create a story map with Geographic Information Systems (GIS) software, telling the narrative of Campbell Farming Corporation. Campbell Farming Corporation (CFC) records and other documents do indeed demonstrate a contested landscape in Big Horn County and illustrate the lasting legacy of Mr. Campbell in the area. One document shows the competition between CFC and a sugar beet company to lease farmland owned by Crow Indians. Many other documents concerning land leases confirm this, as well as the power farming and sugar beet operations had to control the leasing arrangements. Dr. Holcomb plans to continue this project by finishing the story map for use by the Big Horn County Historical Museum and as part of a book about the custom harvesting in the Great Plains.

### **Project Dissemination:**

Erin Long and Professor, Jason P. Holcomb. (2016, April). A Contested Landscape Story Map: Campbell Farming Corporation and the Crow Indian Reservation in Big Horn County, Montana, poster, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

The poster received very good reviews at the Celebration of Student Scholarship.

**Post-Graduation Plans (Seniors only):**

N/A

**SCHOOL OF MUSIC, THEATRE, AND DANCE**

**Blevins, John T.**

**Major:**

Convergent Media

**Faculty Mentor:**

Steven Middleton

**Research/Project Title:**

Far Above the Rolling Campus: A Documented History of Morehead State University

**Project Abstract/Summary:**

Far Above The Rolling Campus is a full-length feature documentary, created based off of the writings of Dr. Donald F. Flatt in his book, A Light to the Mountains. The project has been in progress for over a year and has required research, travel, and countless hours of hard work to get to the point of near completion, which is where the project stands currently. I not only served a producer role in the project, but was also asked to take on the job of Director of Photography, and camera operator, along with co-editor. These positions entailed not only running camera, but being in charge of lighting, helping with shot composition, delving through footage, compiling footage and photographs into a cohesive movie, converting archival film and tapes, cleaning and editing scanned archival photos and creating visually pleasing graphic effects to enhance the viewing quality of the film. Along with these duties, I was also asked to research into the history myself to make sure the project was cohesive and depicted the true history, and also to maintain good interviews with our featured experts.

**Project Dissemination:**

The film will be premiered both internally and externally.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Student will graduate in the Fall of 2016.

**Chabot, Lauralee**

**Major:**

Theatre

**Faculty Mentor:**

Denise Vulhop

**Research/Project Title:**

Madrigal Feaste

**Project Abstract/Summary:**

Lauralee Chabot served as the stage manager and director for the Annual Madrigal Feaste. The nearly sold-out event ran for 2 nights in December.

For this performance, Ms. Chabot researched the performance qualities during the Renaissance Era and fused them with modern performance techniques. She also effectively combined theatre and music elements.

**Project Dissemination:**

Performance in Crager Room, December 3-4, 2015.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Clay, Haley****Major:**

Music

**Faculty Mentor:**

Eric Brown

**Research/Project Title:**

Witness: The Progression of the Negro Spiritual throughout Music History with Regard to the Music of Hall Johnson.

**Project Abstract/Summary:**

The tradition of the Negro spiritual is rooted centuries deep in the culture of world music. From slave hymns to art songs performed in modern day classical music settings, the spiritual has influenced the ways of the world, just as much as the ways of the world have influenced the spiritual. Hal Johnson, a twentieth century composer, perfectly captures the diverse and ever-changing nature of the Negro spiritual through his Collection of Concert Spirituals and Art Songs. These songs not only told storied of pain, struggle, and deep sadness, but of the strength, heroism, and faith of the black man and woman over the course of history. My research examines and analyzes five of Johnson's arrangements that capture the true essence of the Negro spiritual. This research will also embody itself in the form of a lecture recital to be performed during the Fall 2016 semester. Support for this research has been provided by an Undergraduate Research Fellowship through the George M. Luckey Academic Honors Program.

**Project Dissemination:**

Clay, Haley K. and Brown, Eric (2016, April) Witness: The Progression of the Negro Spiritual throughout Music History with Regard to the Music of Hall Johnson, poster, Celebration of Student Scholarship, Morehead, KY, April, 2016.

To be presented:

Clay, Haley K. and Brown, Eric (2016, October) Witness: The Progression of the Negro Spiritual throughout Music History with Regard to the Music of Hall Johnson, lecture recital, Morehead, KY, October.

**Awards and/or Honors:**

Certificate of Exceptional Merit, Department of Music, Morehead State University, Celebration of Student Scholarship, April.

**Post-Graduation Plans (Seniors only):**

N/A

**Connell, Nathan****Major:**

Music

**Faculty Mentor:**

Brian S. Mason

**Research/Project Title:**

Experiments in Sympathetic Vibrations and Percussion Composition

**Project Abstract/Summary:**

Elements of sound production in a snare drum have been studied and manipulated over several centuries of the instrument's existence, resulting in new ways of playing, manufacturing, and tuning the instrument to create new and different sounds from a seemingly limited instrument. Taking a different approach to the subject, this research explores sound production away from the instrument. The aim of this study is to examine the sympathetic vibrations in the snare system of a snare drum, analyzing possible causes and elements that might affect how the vibration is produced. Experiments will be conducted using a single snare drum and a vibraphone, testing the frequencies at which sympathetic vibrations are produced. These experiments will involve the testing of variables that include drumhead tension, drum depth, room acoustics, distance between instruments, the material of the vibraphone, and material of the snares. Following this, compositional ideas will be collected and tested and the resulting data will then be applied as compositional elements in a solo work that demonstrates the findings. This research was funded with an Undergraduate Research Fellowship.

**Project Dissemination:**

Oral presentation at the Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

Certificate of Merit, Celebration of Student Scholarship (2016)

**Post-Graduation Plans (Seniors only):**

N/A

**Dennis, Katie****Major:**

Theatre

**Faculty Mentor:**

Denise Vulhop

**Research/Project Title:**

Digital Conversion of Costume History Slides

**Project Abstract/Summary:**

Katie spend a year cataloguing slides from a collection of costume history research slides. These slides span history from the Ancient Egyptian period through the 1990s.

Once the slides have been catalogued, they will then be scanned and converted to digital format.

**Project Dissemination:**

Poster presentation at the Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

Katie's poster won 1<sup>st</sup> place for the Caudill College of Humanities at Celebration of Student Scholarship.

**Post-Graduation Plans (Seniors only):**

N/A

**Ferguson, Kayla****Major:**

Music

**Faculty Mentor:**

Brian S. Mason

**Research/Project Title:**

History and Styles Associated with the Bodhran Drum

**Project Abstract/Summary:**

The history of the Bodhran Drum is quite vague from the beginning. No one knows exactly for sure where it developed. Some speculate that it derived from similar instruments brought back from the British Crusades. Others make the assumption that it was originally used as a sieve that was played by young boys during St. Stephens Day while hunting for a wren. Either way, the instrument has made astounding developments; from how it is played to how it is made. Many of the changes have been made within the past decade from how the Bodhran is played, the physical body of the instrument, to even the reason that the instrument is played. This research was supported by the Undergraduate Research Fellowship.

**Project Dissemination:**

Poster Presentation at the Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Accepted Graduate Assistantship at Cumberland College, seeking a Master of Music in Percussion Performance.

**Gill, Brittany****Major:**

Music

**Faculty Mentor:**

Lori Baruth

**Research/Project Title:**

What can Dalcroze Do For You? An Exploration of Dalcroze Benefits and Techniques

**Project Abstract/Summary:**

Through this research fellowship, the aim is to discuss the different methods and techniques of Dalcroze Eurhythmics and how they can be employed to serve us in our daily lives. Eurhythmics was created by Emile Jacques-Dalcroze (1865-1950) after he noticed that his students could write harmonies and rhythms, but could not actually hear them. This method of music education utilizes movements, aural training, and improvisation to better develop students hearing performance, and connection to music. Eurhythmics is important for music education and performance. It also has therapeutic applications and can help build confidence and increase spatial/body awareness.

**Project Dissemination:**

N/A

**Awards and/or Honors:**

Fellowship accepted to be presented at Posters-at-the-Capitol event in Frankfort, KY.

**Post-Graduation Plans (Seniors only):**

To find a job teaching for 3-5 years, the graduate school for a masters in wind conducting.

**Miller, Joe****Major:**

Music

**Faculty Mentor:**

Brian Mason

**Research/Project Title:**

A Compilation of the Repertoire Requirements for Undergraduate Percussion Auditions at Top University and College Percussion Studios within the United States.

**Project Abstract/Summary:**

For many high school percussionists seeking to further their musical study at a college or university, the process of selecting appropriate and effective audition repertoire for admission to such an institution can be a daunting task. This intimidation is exacerbated by the fact that most all universities have different audition requirements, from what instruments must be played to what pieces are required or suggested. This study seeks to compile a list of the instruments, composers, and pieces that are most frequently recommended and/or required at undergraduate auditions for top university-level percussion studios in the United States. Ultimately, every school requires the student to play a solo on the marimba, timpani, and concert snare drum. Variance occurs at some schools where the core three instruments are supplemented with additional required or optional instruments and particular pieces of works by a particular composer are required. From utilizing the results of the study, students will be able to more confidently make informed decisions in their audition repertoire selection, and professors will be able to reference the audition requirements of top university percussion programs across the nation. Support for this research came from a Morehead State University Honors Program Undergraduate Research Fellowship.

**Project Dissemination:**

Poster Presentation at the Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Proctor, Darren****Major:**

Music

**Faculty Mentor:**

Brian Mason

**Research/Project Title:**

Music and the Mind: A Greater Look into How Music Effects the Brain

**Project Abstract/Summary:**

The Brain: An intelligent functioning organ; an active organ that is connected to the rest of the nervous system and can therefore produce behavior. Music: The science or art of ordering tones or sounds in succession, in combination, and in temporal relationships to produce a composition having unity and continuity. These two definitions, when given in this context, have no general relation. With the use of various textbooks, in class learning and online resources, connections between music and the brain both on an internal and external level have been observed. Alongside this connection, knowledge about the brain and knowledge about music can be used to help individuals with varying ailments. Through research, discoveries have been made about the different ways in which music effects the brain and how these effects can successfully help individuals with Autism Spectrum Disorders and Dementia, more specifically Alzheimer's Disease. Alongside the presentation, a book has been made that compiles various songs that can be used to help individuals suffering from these ailments. This research has been supported by an Undergraduate Research Fellowship.

**Project Dissemination:**

Poster Presentation at the Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Tyree, John****Major:**

Music

**Faculty Mentor:**

Brian Mason

**Research/Project Title:**

Experiments in Sympathetic Vibrations and Percussion Composition

**Project Abstract/Summary:**

Elements of sound production in a snare drum have been studied and manipulated over several centuries of the instrument's existence, resulting in new ways of playing, manufacturing, and tuning the instrument to create new and different sounds from a seemingly limited instrument. Taking a different approach to the subject, this research explores sound production away from the instrument. The aim of this study is to examine the sympathetic vibrations in the snare system of a snare drum, analyzing possible causes and elements that might affect how the vibration is produced. Experiments will be conducted using a single snare drum and a vibraphone, testing the frequencies at which sympathetic vibrations are produced. These experiments will involve the testing of variables that include drumhead tension, drum depth, room acoustics, distance between instruments, the material of the vibraphone, and material of the snares. Following this, compositional ideas will be collected and tested and the resulting data will then be applied as compositional elements in a solo work that demonstrates the findings. This research was funded with an Undergraduate Research Fellowship.

**Project Dissemination:**

Oral presentation at the Celebration of Student Scholarship

**Awards and/or Honors:**

Certificate of Merit, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Post-Graduation Plans (Seniors only):**

N/A

**Yehilevsky, Gloria****Major:**

Music

**Faculty Mentor:**

Brian Mason

**Research/Project Title:**

Perspectives on Guided Improvisation: Solo Percussion Works, Compositional Techniques, and Forms of Improvisation in Written Works

**Project Abstract/Summary:**

Improvising music and playing classical repertoire tend to be viewed as opposites in the music world. In truth, the two complement each other, and can lend a significant insight into new compositional and performance techniques in today's modern art music world. This study has focused on solo percussion works which include elements of guided improvisation. There are various degrees of improvisation, and various ways of including it in a work. The term guided improvisation refers to a form of improvisation which gives the performer source material and guidelines, but the performer is still left with an amount of freedom which requires him/her to make decisions in every performance, every time he/she plays the piece. It is widely agreed that all musicians need to improvise: a possible bridge towards doing so is through the types of works studied. Each compositional technique leads to a different experience for the performer. Developing these skills places a musician's mind in a different capacity than does playing something that is notated specifically, and helps connect gaps in performing and creativity which are not easily filled otherwise. This research is supported by the George M. Luckey Honors Program and an Undergraduate Research Fellowship.

**Project Dissemination:**

Oral Presentation at the Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**DEPARTMENT OF SOCIOLOGY, SOCIAL WORK, AND CRIMINOLOGY**

**Benitez, Ivan**

**Major:**

Criminology

**Faculty Mentor:**

Rebecca Katz

**Research/Project Title:**

Mr. Benitez and his mentor are developing a theoretical model that explains violence and excessive use of force and exploring the response to police violence, the black lives movement. Department of Justice consent decrees will be explored as well as civil suits against police departments for wrongful death suits.

**Project Abstract/Summary:**

Findings include the involvement of the Black Lives movement in protests around the nation in response to police shootings of people of color and women as well as a focus on transgender and queer rights. Other preliminary findings include violence against misidentified suspects, erroneous reasonableness of officers, and sexual harrasment and assaults against women by police or avoiding thorough investigations of sexual assaults.

**Project Dissemination:**

Mr. Benitez presented preliminary findings at the Annual Celebration of Student Scholarship. We will be presenting in November at the annual Society of Criminology Meetings.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Mr. Benitez plans to go to graduate school and pursue a Masters and Ph.d.

**Blevins, Tracy**

**Major:**

Sociology

**Faculty Mentor:**

Bernadette Barton

**Research/Project Title:**

Organizing the South: Progressive Activism in America's Most Conservative Region

**Project Abstract/Summary:**

The American South is an area that has been predominantly influenced by religious fundamentalism and conservative politics. However, some Southerners challenge the seemingly homogeneous culture in an attempt to upset the status quo. This research consists of interviews with young people (aged 18-30) in the South who are involved in activism or organizing in the region. It explores the methodology of successful, and unsuccessful, progressive political and social organizing in Appalachia and the South. Interviews with progressive activists in the south found that first-hand interactions with oppressive forces sometimes resulted in greater insight regarding how to challenge existing social structures. In addition, because social injustice is more extreme in conservative climates, it is also more visible, thus creating more opportunities more opportunities to mobilize citizens.

**Project Dissemination:**

Blevins, Tracy and Professor, Bernadette Barton. (2016). Organizing the South: Progressive Activism in America's Most Conservative Region, poster, Posters at the Capitol, Frankfort, KY, February.

Blevins, Tracy and Professor, Bernadette Barton. (2016). Organizing the South: Progressive Activism in America's Most Conservative Region, poster, Celebration of Student Scholarship, Morehead, KY, April.

**Awards and/or Honors:**

Greg Goldey Citizen Action Award, Caudill College of Arts, Humanities, and Social Sciences, 2015.

**Post-Graduation Plans (Seniors only):**

Tracy plans to continue her work in activism and political organizing. She recently interviewed with the AmeriCorps VISTA program. She is considering beginning graduate schools in the Fall 2017 semester.

**Flint, Justin McKinley****Major:**

Criminology/Criminal Justice

**Faculty Mentor:**

Elizabeth Perkins

**Research/Project Title:**

My Live My Choice: Preventing Child Sexual Exploitation in Kentucky, a Pilot Program

**Project Abstract/Summary:**

The purpose of this study is to evaluate an anti-trafficking curriculum specifically geared towards teen girls to educate at risk youth to prevent human trafficking and raise awareness of the signs of potential trafficked victims. This curriculum increases teens perceptions of the commercial sex industry and how dangerous and debilitating it can be, as well as increasing teens ability to reduce the risk of exploitation. This research will determine if the My Life My Choice curriculum is an effective tool to both prevent domestic minor sex trafficking and act as a therapeutic tool for those who have been trafficked. For this project, My Life My Choice groups were implemented across the state of Kentucky. Results from the pilot groups show a positive impact.

**Project Dissemination:**

MacFarland, E., Flint, JM, and Perkins, E. (2016, April). My Life My Choice: Preventing Child Sexual Exploitation in Kentucky, a Pilot Program, poster, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

McKinley Flint will be graduating in December 2016. This Fall as he finishes his last few undergraduate courses, he will also be entering the Early Graduate Program here at MSU. He will continue to work with Dr. Perkins on her human trafficking projects while pursuing his graduate degree.

**MacFarland, Emily****Major:**

Geology

**Faculty Mentor:**

Elizabeth Perkins

**Research/Project Title:**

My Life My Choice: Preventing Child Sexual Exploitation in Kentucky, A Pilot Program

**Project Abstract/Summary:**

The purpose of this study is to evaluate an anti-trafficking curriculum specifically geared towards teen girls to educate at risk youth to prevent human trafficking and raise awareness of the signs of potential trafficked victims. This curriculum increases teens perceptions of the commercial sex industry and how dangerous and debilitating it can be, as well as increasing teens ability to reduce the risk of exploitation. This research will determine if the My Life My Choice curriculum is an effective tool to both prevent domestic minor sex trafficking and act as a therapeutic tool for those who have been trafficked. For this project, My Life My Choice groups were implemented across the state of Kentucky. Results from the pilot groups show a positive impact.

**Project Dissemination:**

MacFarland, E., Flint, JM, and Perkins, E. (2016, April). My Life My Choice: Preventing Child Sexual Exploitation in Kentucky, A Pilot Program, poster, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Emily MacFarland will be graduating in December 2016 with a degree in Geology. She is currently pursuing career options.

**Williamson, Amie****Major:**

Social Work

**Faculty Mentor:**

Lisa Shannon

**Research/Project Title:**

Music Therapy: A Holistic Approach

**Project Abstract/Summary:**

There is much support for music therapy as an intervention for stress, cognitive behavioral ideologies and coping skills. Music therapy was first developed in regards to Veterans returning from war who had significant Post Traumatic Stress Disorder, who needed alternative interventions. Music therapy is a field that serves people holistically and serves a wide array of venues. Intervention in music therapy can be found for infants, children, young adults, middle age, and the aging population. There are many different forms of music therapy, such as improvisation, which is creating rhythms and patterns without prior preparation, song writing, music reading and singing. Many of the studies show positive outcomes of music therapy interventions. Some cannot distinguish between the actual music therapy and an intervention in general, but are supportive of music therapy interventions. Overall, music therapy is generally accepted as a supportive intervention for people of all ages but there is very limited funding and availability of music therapists.

**Project Dissemination:**

This project was presented at the 2016 Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

The student plans on furthering her education after graduating Spring 2016. She plans on attending Asbury University and getting a Master's Degree in Social Work and then possibly going into research.

**COLLEGE OF EDUCATION*****DEPARTMENT OF EARLY CHILDHOOD, ELEMENTARY, AND SPECIAL EDUCATION*****Jackson, Emily****Major:**

Education

**Faculty Mentor:**

Mee-Ryoung Shon

**Research/Project Title:**

The Importance of Science in Preschool Classrooms

**Project Abstract/Summary:**

Many early childhood teachers are hesitant to provide engaging scientific activities in preschool setting, often because they are not confident in their ability to do so, and have had unpleasant science education experiences of their own. With this, preschool children are not given the chance to use their natural behaviors to explore and discover the world around them. Providing them with hands-on opportunities to experience science in the classroom gives children a foundation for learning skills they use in everyday life. Ms. Brittany's afternoon preschool class at Bath County participated in a variety of life, physical, and earth/space science activities over the course of three weeks. These activities were used to give the children science experiences within their classroom, and to see the effect they had on their science involvement throughout and after the time period.

**Project Dissemination:**

Poster Presentation at MSU Celebration of Student Scholarship, Morehead, KY, April.

Planning to submit a presentation proposal at Annual Conference of KAECE (KY Association of Early Childhood Education) in Fall 2016.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**McClure, Patricia****Major:**

Education

**Faculty Mentor:**

Mee-Ryoung Shon

**Research/Project Title:**

The Importance of Science in Preschool Classrooms

**Project Abstract/Summary:**

Many early childhood teachers are hesitant to provide engaging scientific activities in preschool setting, often because they are not confident in their ability to do so, and have had unpleasant science education experiences of their own. With this, preschool children are not given the chance to use their natural behaviors to explore and discover the world around them. Providing them with hands-on opportunities to experience science in the classroom gives children a foundation for learning skills they use in everyday life. Ms. Brittany's afternoon preschool class at Bath County participated in a variety of life, physical, and earth/space science activities over the course of three weeks. These activities were used to give the children science experiences within their classroom, and to see the effect they had on their science involvement throughout and after the time period.

**Project Dissemination:**

Poster Presentation at MSU Celebration of Student Scholarship, Morehead, KY, April.

Planning to submit a presentation proposal at Annual Conference of KAECE (KY Association of Early Childhood Education) in Fall 2016.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

***DEPARTMENT OF FOUNDATIONAL AND GRADUATE STUDIES IN EDUCATION*****Kallas, Maria****Major:**

Elementary Education (P-5), Special Education LBD, (K-12)

**Faculty Mentor:**

John Curry

**Research/Project Title:**

Following Trends in Student Perceptions of Mason County 1:1 iPad Implementation

**Project Abstract/Summary:**

In 2012, Mason County High School, located in Maysville, KY, launched a 1:1 iPad implementation. All faculty, staff, and students were given iPads to use for both school and personal use. According to Forbes, at its debut at the start of the 2012-2013 school year, this 1:1 iPad implementation was ranked eighty-ninth largest in the world. This presentation will examine the qualitative data collected this year. The data point included examines the 1:1 implementation through a Diffusions of Innovation theoretical framework. The methodology is a stakeholder-based evaluation that will focus on administration, students, and early responders. This research is sponsored by Morehead State University's College of Education through the Undergraduate Research Fellowship Program.

**Project Dissemination:**

Kallas, M. (2015). LOL! iPad Implementation Does Not Call for TTYL: It is Meant for ASAP! Kentucky Association of Teacher Educators Conference, Frankfort, KY.

Kallas, M. (2016). Needs Improvement to Accomplished: How the 1:1 iPad Implementation Impacted Mason County. National Association of Professional Development School National Conference, Washington, D.C.

Kallas, M. (2016). Needs Improvement to Accomplished: How the 1:1 iPad Implementation Impacted Mason County. Posters at the Capitol, Frankfort, KY.

Kallas, M. (2016). Needs Improvement to Accomplished: How the 1:1 iPad Implementation Impacted Mason County. Celebration of Student Scholarship, Morehead, KY.

Finally, a proposed article on the data collection from this project, for which Maria is a co-author, has just been accepted to be published in the Technology, Instruction, Cognition, and Learning Journal.

**Awards and/or Honors:**

Maria, once again, won the 2016 Celebration of Student Scholarship here at MSU.

**Post-Graduation Plans (Seniors only):**

Maria has been granted early acceptance to the Educational Technology Master's program here at Morehead State University.

**DEPARTMENT OF MIDDLE GRADES AND SPECIAL EDUCATION****Elswick, Justin M.****Major:**

Mathematics (teaching)/Spanish (teaching)

**Faculty Mentor:**

Lesia Lennex

**Research/Project Title:**

Technology in the Secondary Schools

**Project Abstract/Summary:**

As the presence of technology grows, so does its importance and usefulness to chemistry and physics education.

This study focused on how technology is being used in secondary chemistry and physics classrooms across Kentucky and its perceived classroom effects. Using SurveyMonkey, 74 secondary chemistry and physics teachers in 34 Kentucky school districts were asked about the kinds of technology they used in their classrooms and in what way(s) they used technology. The survey response was 23% (N+17). Survey results indicated that teachers used videos, various apps and websites, cell phones, tablets, lab aids, and SMARTboards in their classrooms. Teachers reported using technology for enhancing instruction, easing data collection, and student research. Overall, teachers felt that technology makes instruction better and easier, but can also become a huge distraction for students.

**Project Dissemination:**

N/A

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Farrell, Jessica****Major:**

Mathematics

**Faculty Mentor:**

Jennifer Birriel

**Research/Project Title:**

Statistical Analysis of Nighttime Sky Brightness Data

**Project Abstract/Summary:**

The overuse use of artificial light at night is responsible for a pervasive astronomical and ecological problem known as light pollution. We collected night-sky brightness using a Unihedron Sky Quality Meter with Lens and Ethernet Connectivity (SQM-LE). The device we use to collect data is located within a weather-proof housing on the rooftop of Lappin Hall. Data were collected at five minute intervals from sunset to sunrise each night. This project built upon previous work done by Lauren Duffy, who measured the Lexington, KY area for effects of light pollution. The effects of light pollution in Lexington were compared with the model created with Morehead data, and was used to test the model. In this, the amplification effect of cloudy skies, ground cover snow, and lunar phase were also considered.

**Project Dissemination:**

Oral Presentation at Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

Oral Presentation at Kentucky Honors Roundtable at Eastern Kentucky University.

Oral Presentation at Kentucky Academy of Science at Northern Kentucky University.

**Awards and/or Honors:**

Received 2<sup>nd</sup> place for outstanding physics presentation at the Kentucky Academy of Science.

**Post-Graduation Plans (Seniors only):**

Graduate school in Cambridge, MA at MIT studying technology and policy – Masters Program.

## **COLLEGE OF SCIENCE**

### **DEPARTMENT OF AGRICULTURAL SCIENCES**

#### **Clark, Chip**

**Major:**

Agricultural Science

**Faculty Mentor:**

Patricia Harrelson

**Research/Project Title:**

Effects of Two-Step Weaning Duration on Behavior and Growth Parameters in Beef Cattle

**Project Abstract/Summary:**

Stress during weaning is two-fold, physical separation of the calf and dam along with the alteration of the calf's nutrition due to the prevention of nursing. At weaning, the calf will exhibit increased vocalizations and decreased appetite. One way to reduce the stress at weaning is to use a two-stage weaning method, where an anti-suckling device is placed in the nostrils of the calf for 4-7 days prior to weaning. This allows the calf to remain beside their dam, but unable to nurse. The use of this device has been shown to reduce the stress of the calf, however, has negatively impacted the calf's growth rate. During this study, anti-suckling devices were placed on calves either 4 or 2 days prior to weaning or no device was placed. We measured vocalizations and calf body weights. We observed a linear effect ( $P=0.006$ ) in post-weaning average daily gain, as calves with no anti-suckling devices displayed the highest, and calves in 4-day treatment exhibited the lowest growth rate. We observed a treatment by day interaction as calves without anti-suckling devices, vocalized more starting on the day of weaning

**Project Dissemination:**

Deller, Ashley N., Clark, Emery C., Harrelson, Flint W., and Harrelson, Patricia L. (2016, April). Effects of Two-Stage Weaning Duration on Beef Cattle Growth and Vocalization, poster, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Plans to attend graduate school or vet school. Chip plans to take classes in Fall 2016.

#### **Combs, Tessa**

**Major:**

Agricultural Science

**Faculty Mentor:**

Brent Rogers

**Research/Project Title:**

Improving Soil Health with a Multispecies Cover Cropping System: Preliminary Data

**Project Abstract/Summary:**

Cover cropping is a cultural practice that can be used for weed suppression, nutrient cycling enhancement, soil health improvement, and improved cost efficiency. Cover crops can provide increased levels of nitrogen through symbiotic fixation and can help recycle other nutrients thereby reducing producer cost. In the fall of 2012 a multi-species cover crop of Austrian winter pea (*Pisum sativum* subsp. *Arvense*), crimson clover (*Trifolium incarnatum*), daikon radish (*Raphanus sativus*), and rye (*Secale cereale*) was established on part of a field that had been used for 15+ years to produce corn (*Zea mays*) silage under a conventional or reduced tillage. In the fall of 2014 soil health tests were conducted on the cover cropped portion of the field and on the non-cover cropped portion of the same field. In 2015, soil health tests were repeated. Soil health tests measure characteristics such as aggregate stability, porosity, and biological activity. Two years of data appear to show a trend toward soil health improvement. Indicative of this improvement is the increase in earthworm numbers in the cover cropped areas compared to non-cover cropped areas. Research was supported by the MSU Undergraduate Fellowship Program, the MSU Department of Agricultural Sciences, and MCTCS.

**Project Dissemination:**

Combs, Tessa E. and Rogers, C. Brent (2015, November). Improving Soil Health with a Multispecies Cover Cropping System: Preliminary Data, The Kentucky Academy of Science 101 Annual Meeting, Highland Heights, Kentucky, November.

Combs, Tesse E. and Rogers, C. Brent (2016). Improving Soil Health with a Multispecies Cover Cropping System: Preliminary Data, poster, Posters at the Capitol, Frankfort, KY, February.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Student accepted a position with the Natural Resources Conservation Service (NRCS) as a Soil Conservationist and will begin after graduation in May.

**Deller, Ashley**

**Major:**

Animal Science

**Faculty Mentor:**

Flint Harrelson

**Research/Project Title:**

Effects of Two-Stage Weaning Duration on Beef Cattle Behavior Parameters

**Project Abstract/Summary:**

Stress during weaning is two-fold, physical separation of the calf and dam along with the alteration of the calf's nutrition due to the prevention of nursing. At weaning, the calf will exhibit increased vocalizations and decreased appetite. One way to reduce the stress at weaning is to use a two-stage weaning method, where an anti-suckling device is placed in the nostrils of the calf for 4-7 days prior to weaning. This allows the calf to remain beside their dam, but unable to nurse. The use of this device has been shown to reduce the stress of the calf, however, has negatively impacted the calf's growth rate. During this study, anti-suckling devices were placed on calves either 4 or 2 days prior to weaning or no device was placed. We measured vocalizations and calf body weights. We observed a linear effect ( $P=0.006$ ) in post-weaning average daily gain, as calves with no anti-suckling devices displayed the highest, and calves in 4-day treatment exhibited the lowest growth rate. We observed a treatment by day interaction as calves without anti-suckling devices, vocalized more starting on the day of weaning and continued 3 days after ( $P<0.0001$ ). This research was supported by MSU Undergraduate Research Fellowship.

**Project Dissemination:**

Ashely Deller, Chip Clar, and Drs. Flint Harrelson and Patricia Harrelson (2016, April). Effect of Two-Stage Weaning Duration on Beef Cattle Growth and Vocalization. Poster, 11<sup>th</sup> Annual Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Career Path

**DEPARTMENT OF BIOLOGY AND CHEMISTRY**

**Barnette, Arlo**

**Major:**

English

**Faculty Mentor:**

Allen Risk

**Research/Project Title:**

Structure and Composition of Epiphyte Communities on Eastern Hemlock in Spaws Creek Gorge, KY

**Project Abstract/Summary:**

The eastern hemlock (*Tsuga canadensis*) is a conifer at serious risk in the Appalachian region due to the presence of the hemlock woolly adelgid (*Adelges tsugae*), a non-native insect deadly to the tree. This study aims to determine the type and distribution of epiphytes on the trunk and branches of the eastern hemlock, in an effort to expand knowledge concerning the natural history of the species before canopy-sized individuals disappear from the region. The ongoing study was conducted at Spaws Creek gorge in Menifee County, Kentucky. Lichens and bryophytes were collected at the base of a roughly 200-year old specimen and at 3m intervals up the trunk on all four cardinal compass directions, and from the tops of branches at these same levels in 10x30cm quadrats spaced at 60 cm intervals along the full length of each branch. Abiotic and biotic variables were recorded for each quadrat. All epiphytes were then collected from the quadrats, identified to species, and percent cover estimated for each. This

information was used to extrapolate values for species richness and distribution throughout the tree. This research was supported by an MSU Undergraduate Research Fellowship.

**Project Dissemination:**

Celebration of Student Scholarship 2016.

**Awards and/or Honors:**

Celebration of Student Scholarship 2016 Merit Award.

**Post-Graduation Plans (Seniors only):**

N/A

**Rasp, Ben**

**Major:**

Biology

**Faculty Mentor:**

Allen Risk

**Research/Project Title:**

Dendroclimatological Analysis of Dominant Tree Species on an Eagle Lake Slope

**Project Abstract/Summary:**

Trees respond to their surroundings and thus are affected by climatic variation. Dendroclimatology is a science that examines the relationship between climate and tree growth. The primary objective of this study was to determine the correlations between climatic variables and the standardized annual ring widths of *Oxydendrum arboretum* (sourwood), *Nyssa sylvatica* (sour gum), *Quercus alba* (white oak), *Quercus velutina* (black oak), *Quercus coccinea* (scarlet oak), and *Acer rubrum* (red maple). Another objective of this study was to see how the species response to climate varied from low to high elevation. The study sites were three 1000 m<sup>2</sup> plots that are near Evans Branch upstream of Eagle Lake and ranging from approximately 900 to 1090 ft. in elevation. Using COFECHA, a quality control program that checks the accuracy of dated series, the program was used to correct most of the problem segments. The annual standardized ring widths of these trees will be compared to annual and monthly data for Palmer Drought Severity INDEX (PDSI), precipitation, and temperature. This research was supported by the MSU Honors Program Undergraduate Research Fellowship.

**Project Dissemination:**

Celebration of Student Scholarship 2016.

**Awards and/or Honors:**

Celebration of Student Scholarship 2016 Merit Award.

**Post-Graduation Plans (Seniors only):**

N/A

**Webb, Mary**

**Major:**

Agriculture

**Faculty Mentor:**

Allen Risk

**Research/Project Title:**

Herbaceous Plant Species Floristic Inventory of Carter Caves State Resort Park, Carter County, KY

**Project Abstract/Summary:**

Carter Caves State Resort Park, located in north-central Carter County and established in 1946, covers over 2,000 acres and is rich in geological features. The geology of the park is dominated by sandstone and limestone and includes caves, sinkholes, natural bridges, box canyons, deep gorges, steep-sided cliffs, and rockhouses. An ongoing inventory of the herbaceous angiosperms in the park, including specimens from an assessment of the Morehead State University Herbarium and those collected in the 2013, 2014, and 2015 spring and fall semesters, has produced 447 specimens comprising 304 different species. The plant families best represented by this preliminary inventory are Asteraceae (aster family) and Poaceae (grass family) with 49 and 32 species, respectively. *Castilleja coccinea* (L.) Spreng. (Indian Paintbrush) and *Thaspium pinnatifidum* (Buckley) A. Gray (Cutleaf Meadow Parsnip), listed as endangered and threatened, respectively, by the Kentucky State Nature Preserves Commission (KSNPC) in Kentucky, were found in the park. In the future, additional collections could be made from areas and habitats not yet visited within the park in order to further document the herbaceous flora of this biologically diverse state park. This project was supported by an MSU Undergraduate Research Fellowship.

**Project Dissemination:**

Celebration of Student Scholarship 2016.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

## ***DEPARTMENT OF HEALTH, WELLNESS AND HUMAN PERFORMANCE AND IMAGING SCIENCE***

**Guerrant, Joanna****Major:**

Strategic Communications

**Faculty Mentor:**

Gina Gonzalez

**Research/Project Title:**

The Effects of Feedback on Mastery of a New Motor Skills: A Pilot Test

**Project Abstract/Summary:**

Mastering physical movement occurs through motor learning and experience. Motor development is needed for successful acquisition of sport and other physical skills. A lack of motor skills has been associated with decreased physical activity later in life, which has been linked to a variety of hypokinetic diseases. The current pilot experiment examined the differences in how college age subjects best learned a new motor skill. Eighteen subjects were video recorded while performing 20 trials of a martial arts style side kick and were given visual, verbal, or no feedback. Subjects were also asked to report their self-efficacy and give qualitative feedback responses. Results examined mastery differences among the feedback groups. The purpose of the pilot research was to test and refine experimental procedures for a larger scale study on a wide range of ages from children to older adults.

**Project Dissemination:**

Guerrant, J., & Gonzalez, G.H. B., faculty mentor (2016, Spring). The Effects of Feedback Mastery of a New Motor Skill: A Pilot Test. Celebration of Student Scholarship, Morehead State University, Morehead, KY.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

## ***DEPARTMENT OF MATHEMATICS AND PHYSICS***

**Allen, Joshua****Major:**

Physics/Math

**Faculty Mentor:**

Ignacio Birriel

**Research/Project Title:**

Radiation Measurement of Black Organic Shale Outcrops in Rowan County, KY.

**Project Abstract/Summary:**

The purpose of this research is to see how much radiation local outcrops of black organic shale emit. The black organic shale family includes the following radioactive rocks: Ohio Shale, Sunbury Shale and Bedford Shale and can be found in outcrops throughout Rowan County. These rocks can be found at the surface but most commonly under the surface and are approximately 60 meters in thickness. The amount of radiation that is emitted affects all of the people that live in the area since they are constantly being exposed to the radiation being emitted. The radiation that is emitted can affect the crops growing in the area, such as tobacco. Tobacco plants can absorb alpha particles from the environment that can then cause harm to humans. A GAMMA-SCOUT radioactive detector was used to measure the radioactivity. It is standard radiation detector with a halogen filled Geiger-Muller counter tube.

**Project Dissemination:**

Joshua Allen and Dr. Ignacio Birriel (April 2016). The Measurement of the Radioactivity in Outcrops of Ohio and Sunbury Shale in Rowan County, KY, Oral Presentation, Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

Joshua Allen and Dr. Ignacio Birriel, The Measurement of the Radioactivity in Outcrops of Ohio and Sunbury Shale in Rowan County, KY, Poster Presentation, Kentucky Academy of Science, NKY, November.

**Awards and/or Honors:**

Received the 2016 Celebration of Student Merit Award for the College of Science, Morehead, KY, April.

**Post-Graduation Plans (Seniors only):**

N/A

**Bryan, Greg****Major:**

Mathematics/Legal Studies

**Faculty Mentor:**

Christopher Schroeder

**Research/Project Title:**

Baseball by the Numbers: A Mathematical Look at Offensive Production in Baseball

**Project Abstract/Summary:**

By the end of a season of baseball, there are hundreds if not thousands of numbers of statistics to look at and analyze. When looking at batters, people often associate home runs and RBIs with the signs of a good run producer. However, one can determine the true worth of a hitter by looking at a player's true number of runs created throughout a season. By using this statistic in conjunction with the strength of pitching faced by a hitter, as well as park factors associated with the player's home ball park, we hope to truly determine the effectiveness of the top hitters from each Major League team. This research was funded with an Undergraduate Research Fellowship.

**Project Dissemination:**

Presented at KYMAA Spring 2016 Meeting at Northern Kentucky University – Oral Presentation.

Presented at Morehead State University's Celebration of Student Scholarship, Oral Presentation, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Duffy, Lauren****Major:**

Physics/Math

**Faculty Mentor:**

Jennifer Birriel

**Research/Project Title:**

Measuring Night Sky Brightness in the RGB Color Bands

**Project Abstract/Summary:**

The color spectrum of artificial, night-time lighting is significantly different from the spectrum of the natural night sky. In the past, the color spectra of both low and high pressure sodium lamps were "yellow rich" – similar to the spectrum of sunlight reflected by the moon at night. In a move to conserve energy, LED lighting is being implemented in cities across the globe. LED light tends to be "blue-rich" in comparison to older lamps. Since Rayleigh is more efficient in the blue end of the spectrum, this will have an impact on the amount of light pollution these newer lamps contribute to the night sky. We constructed a portable device to measure the spectrum of the night sky using data logging Uniuhedron Sky Quality Meters and a set of color filters. The device allows us to make simultaneous measurements of the night sky through clear (L), red (R), green (G), and blue (B) filter bands. We describe the design and construction of the device. Preliminary data from several locations in Morehead, KY and Lexington, KY showed a redder night sky in Morehead and bluer night sky in Lexington as compared to our values for a "pristine" dark sky. Finally, we discuss future measurement plans using the device.

**Project Dissemination:**

Student, Lauren D. and Professor, Dr. Jennifer B. (2015, December). Measuring Night Sky Brightness in the RGB Color Bands, oral presentation, Kentucky Academy of Science 2015 Annual Meeting, Highland Heights, KY, December.

Student, Lauren D. and Professor, Dr. Jennifer B. (2016, April). Measuring Night Sky Brightness in the RGB Color Bands. Celebration of Student Scholarship 2016, Morehead, KY, April.

**Awards and/or Honors:**

Kentucky Academy of Science 2015: 3<sup>rd</sup> place in Physics and Astronomy.

Celebration of Student Scholarship 2016: Merit Presentation.

**Post-Graduation Plans (Seniors only):**

I am completing the 3-2 transfer program between MSU and UKY engineering in order to graduate with an electrical engineering undergraduate degree from the University of Kentucky as well as both math and physics undergraduate degrees from Morehead State.

**Fugate, Joshua Z.****Major:**

Mathematics

**Faculty Mentor:**

Wilson Gonzalez-Espada

**Research/Project Title:**

Mesoscale Meteorological Data Identifies Possible Effects of Climate Change in Eastern Kentucky

**Project Abstract/Summary:**

The effects of global climate change, as predicted by the consensus of national and international scientists, are probably not going to be observed uniformly across all latitudes and longitudes. This highlights the importance of observing and analyzing meteorological data at the mesoscale level, that is, weather events that range in size from about one mile to about 150 miles and that might go undetected without densely spaced weather observations. This study applied statistical approaches to daily data between 2007-2015, obtained from several WKU Kentucky Mesoscale Network stations located in Eastern Kentucky. It was found that many Eastern Kentucky counties showed evidence of statistically significant increases in climate parameters such as temperature, dew point, and solar radiation. Many Eastern Kentucky counties showed evidence of a statistically significant decrease in average wind speed. No statistically significant differences in humidity or maximum wind speed were noted. This research was supported by the Undergraduate Research Fellows Program (Department of Mathematics & Physics/Office of Research and Sponsored Programs).

**Project Dissemination:**

Fugate, J.Z.,\* and Gonzalez-Espada, W.J. (2016). Mesoscale Meteorological Data Identifies Possible Effects of Climate Change in Eastern Kentucky. Oral Presentation at the 11<sup>th</sup> annual Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

Fugate, J.Z.\* and Gonzalez-Espada, W. (2016). Evidence of Climate Change in Eastern Kentucky? Oral presentation at the Annual Meeting of the Mathematical Association of America Kentucky Section (KYMAA), Northern Kentucky University, Highland Heights, KY, April.

Fugate, J.Z.\* and Gonzalez-Espada, W. (2016). Evidence of Climate Change in Eastern Kentucky? Oral presentation at the Spring Meeting of the Kentucky Association of Physics Teachers, Centre College, Danville, KY, March.

Knell, J.L., Fugate, J.Z.,\* and Gonzalez-Espada, W.J. (2016). Using Mesoscale Meteorological Data to Identify Possible Local Effects of Global Climate change. Poster presented at the 15<sup>th</sup> Annual Posters-at-the-Capitol, Frankfort, KY, February.

Knell, J.Z., Fugate, J.Z.,\* and Gonzalez-Espada, W.J. (2015). Using Mesoscale Meteorological Data to Identify Possible Local Effects of Global Climate Change. Paper presented at the 101<sup>st</sup> Annual Meeting of the Kentucky Academy of Science, Northern Kentucky University, Highland Heights, KY, November.

\*Fugate, J.Z., Knell, J.L. and Gonzalez-Espada, W.J. (2015). Learning About Weather and Climate with Local Kentucky Data. Workshop presented at the Annual Meeting of the Kentucky Science Teachers Association, Lexington Conference Center, Lexington, KY, November.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**King, Damon****Major:**

Physics

**Faculty Mentor:**

Jennifer Birriel

**Research/Project Title:**

Monitoring Light Pollution in the Morehead, KY Area

**Project Abstract/Summary:**

We collected night sky brightness measurements using the Unihedron Sky Quality Meter at 30 locations around MSU and the surrounding Morehead, KY area. We compared our measurements to those made in 2009 by a previous student using the same locations and measuring device. We produced a brightness map using Google map tools and compared our mean night sky brightness to the data from 7 years ago to determine if there have been any significant changes. Despite population changes, and new lighting, a statistical analysis shows no significant change.

**Project Dissemination:**

N/A

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Knell, Janie L.****Major:**

Mathematics

**Faculty Mentor:**

Wilson Gonzalez-Espada

**Research/Project Title:**

Mesoscale Meteorological Data Identifies Possible Effects of Climate Change In Western Kentucky

**Project Abstract/Summary:**

The most recent consensus of the scientific community regarding global climate change is straightforward: "Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history." This study applied statistical approaches to daily data between 2007-2015 obtained from several WKU Kentucky Mesoscale Network stations, located in Western Kentucky, to test the predictions of global climate change at the mesoscale levels (between 1-150 miles in range). It was found that many Western KY counties showed evidence of statistically significant increases in climate parameters such as temperature, dew point, humidity, and solar radiation. Many Western KY counties showed evidence of a statistically significant decrease in average and maximum wind speed. Understanding mesoscale effects of climate change is important in order to plan ahead and make any necessary changes to minimize its economic and social impact. This research was supported by the Undergraduate Research Fellows Program (Department of Mathematics and Physics/Office of Research and Sponsored Programs).

**Project Dissemination:**

Knell, J.L.\* and Gonzalez-Espada, W.J. (2016). Mesoscale Meteorological Data Identifies Possible Effects of Climate Change in Western Kentucky. Oral presentation at the 11<sup>th</sup> annual Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

Knell, J.L.\* and Gonzalez-Espada, W.J. (2016). Undergraduate Research Fellowships: A Strategic Investment to Reduce Women Underrepresentation in the Mathematical Sciences. Poster present at The Wilma Grote Symposium for the Advancement of Women, Morehead State University, Morehead, KY, April.

Knell, J.L.\* and Gonzalez-Espada, W. Evidence of Climate Change in Western Kentucky. Oral presentation at the Annual Meeting of the Mathematical Association of America Kentucky Section (KYMAA), Northern Kentucky University, Highland Heights, KY, April.

Knell, J.L.\* and Gonzalez-Espada W. (2016). Evidence of Climate Change in Western Kentucky. Oral presentation at the Spring Meeting of the Kentucky Association of Physics Teachers, Center College, Danville, KY, March.

Knell, J.L., Fugate, J.Z., and Gonzalez-Espada, W.J. (2016). Using Mesoscale Meteorological Data to Identify Possible Local Effects of Global Climate Change. Poster presented at the 15<sup>th</sup> Annual Posters-at-the-Capitol, Frankfort, KY, February.

Knell, J.Z., \*Fugate, J.Z., and Gonzalez-Espada, W.J. (2015). Using Mesoscale Meteorological Data to Identify Possible Local Effects of Global Climate Change. Paper presented at the 101<sup>st</sup> Annual Meeting of the Kentucky Academy of Science, Northern Kentucky University, Highland Heights, KY, November.

Fugate, J.Z., \*Knell, J.L., and Gonzalez-Espada, W.J. (2015). Learning About Weather and Climate with Local Kentucky Data. Workshop presented at the Annual Meeting of the Kentucky Science Teachers Association, Lexington Conference Center, Lexington, KY, November.

**Awards and/or Honors:**

KAS Oral Presentations – Undergraduate, 3<sup>rd</sup> place.

**Post-Graduation Plans (Seniors only):**

Actively looking for employment opportunities.

## **DEPARTMENT OF PSYCHOLOGY**

### **Abbott, Zachary**

**Major:**

Psychology

**Faculty Mentor:**

Ilsun White

**Research/Project Title:**

Involvement of Amygdala on Scopolamine-Induced Memory Impairment

**Project Abstract/Summary:**

Activation of muscarinic receptors are required for learning and memory. Previously, we have shown that physiological stress worsens behavioral deficits induced by scopolamine, a muscarinic antagonist, which is commonly used in animal models of Alzheimer's disease. The present study examined the involvement of amygdala in simple learning and memory, using simple tasks. Male Wistar rats were shaped to lever-press for a food pellet, then received amygdala lesions. When their performance reached behavioral criteria, they received scopolamine or vehicle injection in a counterbalanced manner. Rats were trained to alternate fixed ration 5 (FR5, 5-lever presses) and 20 (FR20, 20 lever-presses) to receive a 45 mg pellet. Consistent with previous reports, Scopolamine markedly impaired the first response latencies in FR5 and FR20, with greater deficits during FR20. Amygdala lesion alone had little or no effect on response latencies on both tasks. Given that the role of amygdala in stress-related disorders, present findings are consistent with our previous findings and provide the evidence that amygdala dysfunction would worsen behavioral deficits seen in Alzheimer's patients.

**Project Dissemination:**

Below are some of the outcomes relevant to Zach's involvement in Research, 2015-present.

Abbott, Z., Crisp, K., & White, I. M. (2016, April). Amygdala damage worsens scopolamine-induced deficits in simple tasks. Kentucky Chapter Society for Neuroscience, University of Louisville, Louisville, KY.

Abbott, Z., Howard, H., White, W., & White, I. M. (2015, November). Effects of physiological and pharmacological stress on simple memory. Kentucky Academy of Science Meeting, Highland Heights, Kentucky. Third Place, Undergraduate Poster Competition.

Abbott, Z., & White, I. M. (2015, April). Cholinergic-glutamate interaction in learning and memory. Celebration of Student Scholarship, Morehead State University, Morehead, KY.

Abbott, Z., & White, I. M. (2016, April). Is amygdala critical for a successful performance on simple tasks? Celebration of Student Scholarship, Morehead State University, Morehead, KY.

Howard, H. L., Abbott, Z., White, W., & White, I. M. (2016, April). Muscarinic receptor modulates prefrontal involvement in motivation. Kentucky Chapter Society for Neuroscience, University of Louisville, Louisville, KY.

White, I. M., Abbott, Z., & White, W (2015, October). Synergistic interaction of NMDA and muscarinic receptors in simple response learning. Society for Neuroscience Meeting, Chicago, Illinois.

White, I. M., Howard, H. L., Abbott, Z., & White, W (2016, May). Do Stress Types Alter Memory Function? Association for Psychological Science (APS), Chicago, IL.

**Awards and/or Honors:**

Abbott, Z., Howard, H., White, W., & White, I.M. (2015, November). Effects of Physiological and Pharmacological Stress on Simple Memory. Kentucky Academy of Science Meeting, Highland Heights, KY. Third Place, Undergraduate Poster Competition.

Howard, H.L., Abbott, Z., White W., & White, I.M. (2016, April). Muscarinic Receptor Modulates Prefrontal Involvement in Motivation. Kentucky Chapter Society for Neuroscience, University of Louisville, Louisville, KY. Third Place, Undergraduate Poster Competition.

**Post-Graduation Plans (Seniors only):**

Zach's post-graduate goal is to receive a PhD in Neuroscience. Currently, Zach is a Junior in Neuroscience, and he plans to graduate in December 2016.

**Blanton, Mary****Major:**

Psychology

**Faculty Mentor:**

Tim Thornberry

**Research/Project Title:**

Examining Parent Smoking, Trauma, Reactivity, and Observed Parent-Child Interactions

**Project Abstract/Summary:**

This project examines the associations between parent smoking, trauma-related symptoms, and behaviors observed during a standardized behavior observation. In addition, this project expands on previous pilot data of a novel Reactivity Questionnaire by documenting reactivity in two parent populations – smokers and those with high levels of self-reported trauma-related symptoms. So far, we have successfully recruited 30 local families with children ages 2-10 years old. It is anticipated that this line of research will inform evidence-based assessment and treatment of families affected by various traumas as well as explore family factors associated with varying levels of tobacco dependence. Data collection are ongoing, but preliminary findings presented at the Celebration of Student Scholarship suggest that participating families in this study are reporting clinical levels of child emotional and behavioral problems and are exhibiting more inappropriate behaviors during an observation than is typically observed in other geographic regions using the same behavioral observation system.

**Project Dissemination:**

Blanton, M., Davis, S., Bocook, A., & Thornberry, T. (2016, April). Analyzing the Relationship Between Body Image, Depression, and Anxiety in College Students. 11<sup>th</sup> Annual Morehead State University Celebration of Student Scholarship, Morehead, KY.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Mary has been accepted into MSU's MS program in Clinical Psychology.

**Bocook, Adam****Major:**

Psychology

**Faculty Mentor:**

Tim Thornberry

**Research/Project Title:**

Examining Parent Smoking, Trauma, Reactivity, and Observed Parent-Child Interactions

**Project Abstract/Summary:**

This project examines the associations between parent smoking, trauma-related symptoms, and behaviors observed during a standardized behavior observation. In addition, this project expands on previous pilot data of a novel Reactivity Questionnaire by documenting reactivity in two parent populations – smokers and those with high levels of self-reported trauma-related symptoms. So far, we have successfully recruited 30 local families with children ages 2-10 years old. It is anticipated that this line of research will inform evidence-based assessment and treatment of families affected by various traumas as well as explore family factors associated with varying levels of tobacco dependence. Data collection are ongoing, but preliminary findings presented at the Celebration of Student Scholarship suggest that participating families in this study are reporting clinical levels of child emotional and behavioral problems and are exhibiting more inappropriate behaviors during an observation than is typically observed in other geographic regions using the same behavioral observation system.

**Project Dissemination:**

Ball, A.N., Monn, B.A., Bocook, A.R., & Thornberry, T.S. (2016, April). The impact of poor sleep on academic performance and mental health in college students. 11<sup>th</sup> Annual Morehead State University Celebration of Student Scholarship. Morehead, Kentucky.

Blanton, M., Davis, S., Bocook, A., & Thornberry, T. (2016, April). Analyzing the relationship between body image, depression, and anxiety in college students. 11<sup>th</sup> Annual Morehead State University Celebration of Student Scholarship. Morehead, Kentucky.

Bocook, A.R., Davis, S. & Thornberry, T. (2016, April). Analyzing differences in observed child externalizing behaviors across states. 11th Annual Morehead State University Celebration of Student Scholarship. Morehead, Kentucky.

Bocook, A.R., Zumwalt, T.F. & Thornberry, T. (2016, April). Analyzing the effect of center-based child care enrollment on externalizing behaviors. Kentucky Psychological Association, Georgetown, Kentucky.

Zumwalt, T.F., Bocook, A.R. & Thornberry, T. (2016, April). Analyzing relationships between anxiety and GPA in first-generation college students. Poster presentation at Kentucky Psychological Association, Georgetown, Kentucky.

**Awards and/or Honors:**

April, 2016: Certificate of Merit, Celebration of Student Scholarship.

**Post-Graduation Plans (Seniors only):**

N/A

**Chandler, Hunter**

**Major:**

Psychology

**Faculty Mentor:**

Ilsun White

**Research/Project Title:**

Neural Correlates of Error Detection and Prediction

**Project Abstract/Summary:**

Our ability to discriminate emotion correctly influence our behavior mediated by unconscious and conscious process. The neural structure for conscious control of emotion may depend on the prefrontal cortex. The first phase of this project we examined characteristics of the factors that accompany errors in emotion recognition at the level of behavior. Hunter has made some progress during the initial stage of the first phase.

**Project Dissemination:**

Hunter has not produced outcomes (see attached resignation letter).

However, he was able to read relevant materials and learned some 'concepts' of mathematical modeling during his URF.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Hunter has engaged in tutoring students in learning center at AY. His short-term goals are not clear at the present time.

**Hamm, Ashley**

**Major:**

Psychology

**Faculty Mentor:**

Shari Kidwell

**Research/Project Title:**

Emotion Understanding and Regulation among Early Adolescents

**Project Abstract/Summary:**

The major aim of Dr. Kidwell's larger research agenda is to understand the mechanisms through which high-quality (i.e., secure) parent-child relationships and sensitive caregiving promote children's social and emotional adjustment. A comprehensive longitudinal study, funded through NSF's KY EPSCoR and MSU's RCPC, has been the primary vehicle through which such questions are beginning to be answered. The study began when the children were 4 and assessed the families most recently when the children were 11-14 years old. Previous findings have indicated that relatively few of our participating parents are securely attached, and that these insecure attachments and the accompanying difficulties have often been "passed down" from parent to child.

A core reason for this intergenerational pattern is thought to be how parents socialize their children's expression of emotion, particularly negative emotion, which consequently affects children's emotion and coping skills. Gottman and Katz (1997) and Saarni (1999) have described parental "emotion coaching" as related children's positive adjustment. When young children experience a negative emotion, ideally parents teach them to label and discuss it and to generate effective coping strategies. By the adolescent years, these methods of dealing with emotion may be seen as intrinsic to the child, even if their roots are in dyadic patterns of relationships.

Ashely's URF project in 2014-2015 showed that children used more avoidance coping when their parents had a non-coaching approach to dealing with anger. We have extended this work in Ashley's 2015-2016 URF by investigating

the degree to which our early teen participants have a mindful attitude towards negative affect. Mindfulness is the opposite of avoidance; rather it is openness to experience emotions in the present moment without resistance or defense. Ashley has read the literature on mindfulness and emotion, particularly from the perspective of Acceptance and Commitment Therapy (ACT: Hayes, Strosahl, & Wilson, 2012), and has helped develop a complex coding system for quantifying children's discussions of anger and sadness episodes. This goes beyond stated coping strategies to examine the depth of children's descriptions of these experiences and also their affect and behavior as they discuss them. Initial results suggest that insecurely attached children have difficulty tolerating negative affect, particularly sadness. Avoidance coping may allow them to temporarily escape the aversive state, though it does not really solve the problem that caused the negative affect in the first place. This intensive work to understand the process of coping with negative affect will allow us to hypothesize about clinical interventions that might be effective for such children.

**Project Dissemination:**

Hamm, A.N., Shepherd, J.L., Morris, A.N., Alshafie, G., Ramos, W., & Kidwell, S.L. (2016, April). Children's Attachment Coping Strategies, and Socioemotional Functioning. 11<sup>th</sup> Annual Morehead State University Celebration of Student Scholarship, Morehead, KY, April.

Ashley's work this year has been central to a student's master's thesis and will be included in at least one publication. It is highly likely she will present this work at fall and spring conferences as well.

**Awards and/or Honors:**

Ashley will be switching to an AHRC-funded URF for her final, senior year. Her work on the project described above leaves her very well-qualified to assist in the AHRC project, which involves intervention with mothers and babies.

**Post-Graduation Plans (Seniors only):**

N/A

**Hanes, Katelyn S.**

**Major:**

Psychology

**Faculty Mentor:**

Laurie Couch

**Research/Project Title:**

Katie worked primarily on a project about romantic breakup experiences in college students. Her role was to investigate the psychological adjustment of those who attempt to stay friends with an ex-romantic partner versus those who do not.

**Project Abstract/Summary:**

The project sought to determine whether staying friends with an ex-partner would have negative effects on one's attempts to get over a romantic breakup. Whereas some wish to maintain friendships in order to continue receiving relational benefits from ex-partners after breakup, it was hypothesized that doing so may lead to suffering and hinder recovery after the event. Thus, post-breakup recovery was assessed through an online survey of 144 college students whose romantic partners had broken up with them. A statistical comparison (via a MANCOVA) was made of post-breakup friends vs. non-friends on three types of adjustment (e.g., post-breakup negative emotions, continued rumination, unresolved grief), while also controlling for the passage of time. Results revealed that friendship status was reliably associated with adjustment problems after breakup. Specifically, independent of the passage of time, those who were friends with their ex-partners reported greater continuing post-breakup grief and rumination than those who were not friends with their ex-partners. Negative post-breakup emotions, however, were unrelated to friendship status. Results are discussed in terms of their clinical implications and significance for individuals trying to get over a breakup.

**Project Dissemination:**

Katie delivered a paper presentation during the 2016 spring semester. She also has developed a manuscript that she hopes to submit for publication at the end of the summer. These include:

\*Hanes, K.S. & Couch, L.L. (2016, March). Lets Be Friends: An Investigation of Ex-Partner Friendships and Adjustment After Romantic Breakup. Southeastern Psychological Association, New Orleans, LA. Paper also presented at the 2016 Morehead State University Celebration of Student Scholarship, Morehead, KY.

Couch, L.L., & Hanes, K.S. (in preparation). Psychological Adjustment Associated with Ex-Partner Friendships After Romantic Breakup.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

**Kootz, Macy T.****Major:**

Psychology

**Faculty Mentor:**

Laurie Couch

**Research/Project Title:**

Macy worked primarily on a project about romantic breakup experiences in college students. In previous semesters she has explored how personality factors, such as one's attachment style, contributes to the breakup experience. This year, using the same data, she focused on how one's level of relationship-contingent self-esteem is related to psychological growth through breakup.

**Project Abstract/Summary:**

Macy submitted one manuscript for publication, and presented another paper at the Southeastern Psychological Association annual meeting (as well as the CSS on campus). Here is the abstract from her newest paper: Tying one's self-worth to the success of relationships, known as relationship-contingent self-esteem (RCSE), is a risk factor for poor adjustment when relationships dissolve, but greater initial suffering after stressful events like breakups has been shown to lead to later psychological growth. Thus, it was hypothesized that, independent of the time since breakup, those high in RCSE would experience more post-traumatic growth from their breakup than those with low RCSE. To test the hypothesis, college students completed an online survey about their worst breakup, which included measures of RCSE and growth, as well as demographic questions and a question about who initiated the breakup. Then, a three-way ANCOVA was conducted with RCSE level (low vs. high), breakup initiator status (breaker vs. breakee), and sex as the independent variables, post-breakup growth as the dependent variable, and time since breakup as the covariate. Results indicated that only RCSE was related to posttraumatic growth. Specifically, as hypothesized, those with high RCSE reported greater post-breakup growth than those with low RCSE. Clinical implications, including strategies for promoting growth through clinical intervention, as well as suggested future studies are discussed.

**Project Dissemination:**

Macy submitted a manuscript for review for publication, and delivered a paper presentation during the 2015-16 academic year. They were:

Couch, L.L., \*Kootz, M.T., & Kidwell, S.L. (under review). Gaining Closure: An Attachment Style Comparison of Psychological Resolution After Breakup.

\*Kootz, M.T., & Couch, L.L. (2016, March). An Investigation of Relationship-Contingent Self-Esteem and Post-Breakup Psychological Growth. Southeastern Psychological Association, New Orleans, LA. Paper also presented at the 2016 Morehead State University Celebration of Student Scholarship. Morehead, KY.

**Awards and/or Honors:**

Macy was awarded a \$20,000 scholarship to study Counseling Psychology at Boston College.

**Post-Graduation Plans (Seniors only):**

Macy will attend Boston College in the Counseling Psychology Master's program.

**McClellan, Derek****Major:**

Psychology

**Faculty Mentor:**

Gilbert Remillard

**Research/Project Title:**

The Role of Dispositional Mindfulness and Inhibitory Control on Implicit Sequence Learning

**Project Abstract/Summary:**

Research examining the relationship between mindfulness (i.e., the ability to remain focused in the present) and implicit sequence learning (i.e., the ability to learn the structure of sequences in the absence of awareness of the structure) has yielded contradictory results. We further examined the relationship between mindfulness and implicit sequence learning and also examined ability to inhibit prepotent responses as a potential mediator/moderator. Participants completed a mindfulness inventory (Mindfulness Attention Awareness Scale) and two computer-based tasks. The first task (Sustained Attention to Response Task) measured inhibitory control by requiring participants to

responds to most stimuli in a sequence of stimuli and to withhold responding to a rare stimulus. The second task (Serial Reaction Time Task) measured implicit sequence learning by exposing participants to a sequence of stimulus locations and requiring participants to respond to each stimulus location with a corresponding key press. Unbeknownst to participants, the sequence of stimulus locations was structured in that the next location of the stimulus was dependent on the previous location of the stimulus. Participants' awareness of the sequence was assessed using a questionnaire. The results did not reveal a relationship between any of the three constructs (implicit sequence learning, inhibitory control, and dispositional mindfulness).

**Project Dissemination:**

McClellan, D.K. and Remillard, G. (April, 2016) The Role of Dispositional Mindfulness and Inhibitory Control on Implicit Sequence Learning. Celebration of Student Scholarship, Morehead State University, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

Accepted into the Masters Program in Experimental Psychology at Eastern Kentucky University.

**Shepherd, Jessica**

**Major:**

Psychology

**Faculty Mentor:**

Shari Kidwell

**Research/Project Title:**

Parental Emotion Socialization with Early Adolescents

**Project Abstract/Summary:**

The major aim of Dr. Kidwell's larger research agenda is to understand the mechanisms through which high-quality (i.e., secure) parent-child relationships and sensitive caregiving promote children's social and emotional adjustment. A comprehensive longitudinal study, funded through NSF's KY EPSCoR and MSU's RCPC, has been the primary vehicle through which such questions are beginning to be answered. The study began when the children were 4 and assessed the families most recently when the children were 11-14 years old. Previous findings have indicated that relatively few of our participating parents are securely attached, and that these insecure attachments and the accompanying difficulties have often been "passed down" from parent to child.

A core reason for this intergenerational pattern is thought to be how parents socialize their children's expression of emotion, particularly negative emotion, which consequently affects children's emotion and coping skills. Gottman and Katz (1997) and Saarni (1999) have described parental "emotion coaching" as related children's positive adjustment. When young children experience a negative emotion, ideally parents teach them to label and discuss it and to generate effective coping strategies. By the adolescent years, these methods of dealing with emotion may be seen as intrinsic to the child, even if their roots are in dyadic patterns of relationships.

Jessica's work this semester involved examining the "fit" of coding systems that quantified parental emotion socialization to varied data we have collected. She particularly viewed play tasks from age 4 and a dyadic conflict task when children were 12. We found that a measure of sensitivity to child cues worked well as a gauge of parenting quality at early ages, though it did not give us direct assessment of emotional socialization. Additionally, we found that observational assessment of parenting in the teen years is a neglected area of published research; however, we noted the use of parental emotion state language in the conflict task and believe that coding manual can be adapted for use with this task and at this age.

**Project Dissemination:**

Shepherd, J.L., Hamm, A.N., Morris, A.N., Greene, D., Cade, K., Deaton, M., & Kidwell, S.L. (2016, April). Associations Between Children's Attachment and Parenting at Age 4 and 12 Years. 11<sup>th</sup> Annual Morehead State University Celebration of Student Scholarship, Morehead, KY, April.

**Awards and/or Honors:**

N/A

**Post-Graduation Plans (Seniors only):**

N/A

## **Zumwalt, Taylor**

### **Major:**

Psychology

### **Faculty Mentor:**

Tim Thornberry

### **Research/Project Title:**

Examining Parent Smoking, Trauma, Reactivity, and Observed Parent-Child Interactions

### **Project Abstract/Summary:**

This project examines the associations between parent smoking, trauma-related symptoms, and behaviors observed during a standardized behavior observation. In addition, this project expands on previous pilot data of a novel Reactivity Questionnaire by documenting reactivity in two parent populations – smokers and those with high levels of self-reported trauma-related symptoms. So far, we have successfully recruited 30 local families with children ages 2-10 years old. It is anticipated that this line of research will inform evidence-based assessment and treatment of families affected by various traumas as well as explore family factors associated with varying levels of tobacco dependence. Data collection are ongoing, but preliminary findings presented at the Celebration of Student Scholarship suggest that participating families in this study are reporting clinical levels of child emotional and behavioral problems and are exhibiting more inappropriate behaviors during an observation than is typically observed in other geographic regions using the same behavioral observation system.

### **Project Dissemination:**

Bocook, A.R., Zumwalt, T.F., & Thornberry, T. (2016, April). Analyzing the Effect of Center-Based Child Care Enrollment on Externalizing Behaviors. Kentucky Psychological Association, Georgetown, KY.

Zumwalt, T.F., Bocook, A.R., & Thornberry, T. (2016, April). Analyzing Relationships Between Anxiety and GPA in First-Generation College Students. Poster presentation at Kentucky Psychological Association, Georgetown, KY.

### **Awards and/or Honors:**

N/A

### **Post-Graduation Plans (Seniors only):**

N/A

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