

MARS HILL UNIVERSITY

*Tuesday*



*April 7th*

# SLAM

STUDENT LIBERAL ARTS MOSAIC

MARS HILL, NORTH CAROLINA

*1856*



*2015*



• Research - Perform - Create •

## LOGISTICS for



*Please Read Carefully!*

*Remove your SLAM Passport from the program.  
Add your name and signature to the back of the Passport.  
Your Passport is your personal ticket into SLAM activities.  
It will be stamped at the door of each session you attend.*

**DO NOT LOSE IT!**

*Many professors will ask to see your Passport as proof of attendance.*

- During Oral Presentations (Sessions I and IV), thematically arranged groups of presentations will be happening **SIMULTANEOUSLY** in **MULTIPLE PLACES** on campus. Check your program carefully and decide which you want to attend. You will only be able to attend one group of presentations in each session. Please remain in that session for all presentations.
- The Arts Break Performances (Session II) are also happening simultaneously in **MULTIPLE PLACES** on campus. The performances begin at 10:30 and last for twenty minutes. They will be repeated at 11:00 so you can attend more than one.
- To be eligible for one of the Fabulous SLAM Door Prizes, you must be present at the Closing Celebration at 2:45 pm in Moore Auditorium and your passport must have four stamps that show you have attended:
  - ✓ Session III (Plenary - Neil Anderson-Himmelspace) AND
  - ✓ All 3 other sessions (Sessions I, II, IV)
- **What next?** Select one of the exciting presentation groups from Session I. Hurry on over to its location. Some may be Standing Room Only, so get there quick to get a seat!

**HAVE FUN and GET SLAMMED!**

### CREDITS:

Cover Design:

Daniel Spurgin (SLAM designs are produced each year by Graphic Design students)

Slam Stage Banner Design:

Claudia Cala, Kristin Kilpatrick, Katie Ledford, Jessica Lowman, Hannah McGinnis, Elizabeth Ravel, Cody Webb

# ORDER OF CEREMONIES

IN THE ONE HUNDRED FIFTY-NINTH YEAR OF MARS HILL UNIVERSITY  
APRIL 7, 2015  
MOORE AUDITORIUM

THE FANFARE: MHU PERCUSSION ENSEMBLE

8:45 A.M.

*Sam Cobb, Rogan Cook-Butler, Jonathan Leonard, Elizabeth Maynard,  
Anthony Sabatino, Spencer Taunton, Austin Williams*

*Dr. Brian Tinkel, director  
Mr. Justin Mabry, assistant director*

OPENING CELEBRATION:

9:00 – 9:20 A.M.

The Invocation

Megan Currie  
*Religion Major*

The Vice President's Welcome

Dr. John Wells  
*Executive Vice President*

Welcome from the SLAM Committee

Stephen Pate  
*Sociology Major*

Charge to Students, Faculty, and Friends

Mrs. Joy Clifton  
*Asst. Professor of Physical Education*

Mars Hill University

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... of Research, Performance, and Creativity

SESSION I: ORAL PRESENTATIONS

9:30 – 10:15 A.M

**Session I – A: There's No Place Like Home**

**Location: Band Room**

*Companion Animals: A Home Away From Home*

Maslyn Greene  
Junior  
Zoology

*Living in the Shadows: A Look at the Lives of Mexican-American Families*

Sharon Sotelo  
Senior  
Social Work

**Session I – B: Frisked or Fract**

**Location: Belk Auditorium**

*The Color of Justice: The History and Importance of Minorities in American Policing*

Isaac I. Phyll  
Senior  
Criminal Justice and Sociology

*Mathematics and Art: The Fibonacci Sequence, Golden Ratio, and Fractals*

Thomas Mason  
Junior  
Math

Ryan Ray  
Senior  
Math

## Session I – C: Spring Break Springs Hope

**Location: Bentley Fellowship Hall**

*Venturing Into Hope: Lesson Learned From the Women of The Next Door and Thistle Farms*

Rebecca Butler  
*Freshman  
Biology*

Abigail Harty  
*Freshman  
Special Education*

Daijaha Covington  
*Sophomore  
Social Work*

Brooke Hudson  
*Junior  
Criminal Justice & Sociology*

Khloe' Rowe  
*Junior  
Criminal Justice & Sociology*

*Women in Haiti: How is poverty affecting girls who are enrolled in school?*

Kristin Bristol  
*Junior  
Social Work*

Samantha Lawson  
*Sophomore  
Art*

Megan Currie  
*Junior  
Religion*

Savannah Maynor  
*Junior  
Integrated Education*

Grace Diepenbrock  
*Senior  
Art*

Meagan McNeely  
*Junior  
Religion & Sociology*

Madelyn Dix  
*Junior  
International Studies*

Daniel Nelson  
*Sophomore  
History*

Bethany Price  
*Freshman  
Elementary Education*

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**Session I – D: Lesser of Two Evils**

**Location: Broyhill Chapel**

*Psychological Effects of Advertising on Nutrition Decisions*

Kate Wright  
Senior  
Psychology

*I Trust You, Tell Me How to Vote*

Jacquelyn Miner  
Senior  
Political Science

**Session I – E: Fish & Flowers**

**Location: Ferguson 135**

*Environmental Effects on the Growth Rates of Fresh Water Fish*

Trisha Halsey  
Senior  
Zoology

Kevin M. Trudell  
Senior  
Biology

*The Serpent of the Flower: Faulkner's and Hemingway's Representations of 1920s Women*

Shelbie English  
Senior  
English

**Session I – F: Failure to Communicate**

**Location: Nash 212**

*Quorum Sensing: Mechanisms and Relationships to the Future of Antibiotics*

Ansley Beth Ricker  
Senior  
Biology

*Language Brokering and its Effects on Parental Roles*

Savanna Clark  
Senior  
Sociology

INTER-SESSION SNACK BREAK

10:15 – 10:30 A.M.  
NEAR ORAL SESSION VENUES

SESSION II: ARTS BREAK

10:30 – 11:15 A.M.

*Each “Act I” performance lasts 20 minutes.  
After a 10- minute intermission, the performances  
will be repeated during “Act II.”  
Please use the intermission to change locations.  
This makes it possible to attend a second Arts Break event.*

**Arts Break – A**

**Location: Broyhill Chapel**

*“Putting It Together” – The Pulitzer Prize Winning Musical in the 21st Century*

Steven Green  
Senior  
Musical Theatre

Chelsea St. John  
Senior  
Musical Theatre

Annie Tesh  
Senior  
Musical Theatre

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**Arts Break – B**

*Reality's Freakshow*

**Location: Moore Auditorium**

Kenneth Anderson  
*Senior*  
*Political Science*

Jazmin Goodson  
*Junior*  
*Business*

David Campbell  
*Junior*  
*Physical Education*

Joselyn Gorman  
*Junior*  
*Sociology & Psychology*

Terry Chavis  
*MHU Graduate Assistant*

Phil Gross  
*Junior*  
*Athletic Training*

Aiyana Chin  
*Sophomore*  
*Business*

Shaquavia Harper  
*Sophomore*  
*Biology*

Alexandria Douglas  
*Freshman*  
*Biology*

Danielle Hughes  
*Freshman*  
*Biology*

Gabriella Dubovoy  
*Freshman*  
*International Studies*

Jennifer Lucas  
*Sophomore*  
*Biology*

Maya Williamson  
*Freshman*  
*Theatre Arts*



## Arts Break – C

## Location: Peterson Conference Center

*Cadenza: Thinking Back and Looking Forward*

Tricia Ellis  
Senior  
*English and Apparel & Interior Merchandising*

John Perron  
Sophomore  
*Art and Visual Communication Design*

Megan Shiflett  
Junior  
*Business Administration*

Daniel Spurgin  
Senior  
*Business Administration*

## Arts Break – D

## Location: Quad (Rain Location: Marshbanks 101)

*Linked Together: A Community-Building Art Project*

Ashley Blackford  
Senior  
*Art Therapy*

## Arts Break – E

## Location: Timberline

*The Slam at SLAM: Passion, Anger, Rhythm, and Rhyme in Student Spoken Word Poetry*

Julia Bridges  
Freshman  
*Integrated Education*

Stephen Pate  
Junior  
*Sociology*

Isaac Phyll  
Senior  
*Criminal Justice & Sociology*

Ashleigh Rose  
Freshman  
*Zoology*

Rose Smith  
Freshman  
*Middle Grades Education*

Spencer Taunton  
Freshman  
*Music Education*

SESSION III: PLENARY SESSION

11:30 A.M. - 12:15 P.M.

LOCATION: MOORE AUDITORIUM

Introduction of the Speaker

Dr. Alan Theisen  
*Assistant Professor of Music*

***Notes in Motion:  
Composing Music for Television,  
Animation, and the Concert Stage***

**Neil Anderson-Himmelspach**

LUNCH BREAK

12:15– 1:30 P.M.

LOCATION: PITTMAN DINING HALL OR ON YOUR OWN

## SESSION IV: ORAL PRESENTATIONS

1:30 – 2:30 P.M.

### **Session IV – A: Silver Bullet**

**Location: Band Room**

*Celebrating Learning Differences*

Chelsea West  
Senior  
English

*Glucose as a Targeting Molecule of Infectious Agents to Deliver Silver Drugs to Kill Bacteria*

Alexandria Wilson  
Senior  
Chemistry

### **Session IV – B: Hands Up!**

**Location: Belk Auditorium**

*Fighting Fear: Counter Terrorism*

Roger Bickel  
Freshman  
Criminal Justice

Seth VanDerwerken  
Sophomore  
Criminal Justice

*Your Hands Give You Away*

Keri Oxendine  
Junior  
Biology

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**Session IV – C: Playing for Pay**

**Location: Broyhill Chapel**

*Playing for Pay: Athletics and Academics*

Amber Demasio  
*Sophomore*  
*Art Therapy*

Trenton Miller  
*Senior*  
*Business*

Erin Francey  
*Sophomore*  
*Zoology*

Jacquelyn Miner  
*Senior*  
*Political Science*

Nathan Jones  
*Sophomore*  
*Math*

Daniel Nelson  
*Sophomore*  
*History*

Cameron McDaniel  
*Junior*  
*Business*

Corey Pettigrew  
*Junior*  
*Zoology*

**Session IV – D: Working Out Yourself**

**Location: Fellowship Hall**

*A Bronte Hierarchy of Needs: Using Ecocriticism to Self-Actualize*

Tricia Ellis  
*Senior*  
*English*

*Personal Trainer? Self Efficacy? What's In It For Me?*

Kristen Faith Trammell  
*Senior*  
*Physical Education*

## **Session IV – E: Garbage In, Garbage Out**

**Location: Ferguson 135**

*Optimization of a High Performance Liquid Chromatography (HPLC) for the Determination of Imidazole in Surface Waters as an Indicator of Straight Piping*

Terris Jakobi Scroggins  
Senior  
Chemistry

*Go Healthy Here: Increasing Access to Healthy Foods in Convenience Stores*

Angela Brock  
Senior  
Social Work

Stacy Yarbrough  
Senior  
Social Work

## **Session IV – F: Keep the Mountains Singing**

**Location: Nash 212**

*Microhabitat Use by Migrating Songbirds in the Southern Appalachian Mountains*

Anjelika Kidd  
Senior  
Zoology

*Community-based Creativity: Appalachian Women as Catalyst for Sustainability and Change*

Amethyst Strivelli  
Junior  
Art Therapy

**CLOSING CELEBRATION**

**2:45 P.M.**

**LOCATION: MOORE AUDITORIUM**

## PRESENTATION ABSTRACTS

**Kenneth Anderson, David Campbell, Terry Chavis, Aiyana Chin, Alexandria Douglas, Gabriella Dubovoy, Jazmin Goodson, Joselyn Gorman, Phil Gross, Shaquavia Harper, Danielle Hughes, Jennifer Lucas, Maya Williamson**

*Reality's Freakshow*

The M. Hill Steppers is an organization bringing African-American cultural aspects to the Mars Hill University campus, giving all students another way to express themselves and foster new relationships. Stepping is a combination of hand clapping, stomping and chanting that makes rhythmic beats and is very entertaining to watch. This show exemplifies how people who are feared the most have fears themselves. The main character is forced to face her fears in a twisted display of her innermost demons; even the most hidden of secrets come to light in Reality's Freakshow. A combination of step, dance, acting and costumes, Reality's Freakshow will be sure to please the crowd.

**Roger Bickel, Seth VanDerwerken**

*Fighting Fear: Counter Terrorism*

In recent decades several ideological, extremist groups began surfacing around the world, such as Al-Qaeda, Al-Shabaab, the Shining Path, and many others. These groups use terrorism as a vehicle to attain their goals and enforce ideologies. The FBI defines terrorism as violent acts that are intended to intimidate or coerce a civilian population to influence government policy. Terrorism, itself, isn't a new concept, dating back to Julius Cesar; however, the ability of terrorists to bypass borders and use social media are new concerns. The tactics used by these groups define them as terrorist organizations. Several countries have attempted to combat these groups by using a different array of counter terror tactics to combat their reach and attacks. These tactics range from psychological to direct confrontation with Special Forces to empowering local governments with the tools to combat the groups. These tactics have varying degrees of success. With the organized group's ability to adapt, tactics must also adapt.

**Ashley Blackford**

*Linked Together: A Community-Building Art Project*

Mars Hill University has brought us together. We all come from different backgrounds and have had different experiences over our lifetime, and yet we are linked through our shared time at MHU. This art block will allow you to identify who you are as an individual at Mars Hill University or within the Mars Hill community through creating your own links in the ever growing MHU chain. At the end, we will have a chain long enough to stretch across campus that will showcase the diversity and strength of Mars Hill University!

**Julie Bridges, Stephen Pate, Isaac Phyll, Ashleigh Rose, Rose Smith, Spencer Taunton**

*The Slam at SLAM: Passion, Anger, Rhythm, and Rhyme in Student Spoken Word Poetry*

Every February, the Black Student Association hosts a poetry slam featuring students from across campus competing for prizes and glory. This is your opportunity to hear the contenders and champions from the 2015 poetry slam perform passionate, rhythmic, and exciting spoken word poetry about topics important to MHU students.

**Kristin Bristol, Megan Currie, Grace Diepenbrock, Madelyn Dix, Samantha Lawson, Savannah Maynor, Terrance McKnight, Meagan McNeely, Daniel Nelson, Bethany Price**

*Women in Haiti: How is poverty affecting girls who are enrolled in school?*

“Study after study has taught us that there is no tool for development more effective than the education of girls and the empowerment of women”, Kofi Annan, former Secretary General of the UN. During Spring Break, 10 students and 3 faculty/staff visited Terrier Rouge, Haiti on the 3rd annual Haiti Spring Break Trip. In a community where more half of the people live in extreme poverty, what could a small group of students do to help? This year, the group embraced the words of Kofi Annan and focused on girls’ education in the local village of Terrier Rouge. During this presentation the group will discuss the ongoing project, the area in which MHU students work, and next steps in supporting the people of Terrier Rouge.

**Angela Brock, Stacy Yarbrough**

*Go Healthy Here: Increasing Access to Healthy Foods in Convenience Stores*

Did you know that Madison County is considered a food desert? Food deserts are areas where residents have little to no access to fresh, healthy, and affordable foods. With only two supermarkets located in Madison County, many residents frequently purchase food items from local convenience stores, and their access to healthy food items can be limited. This presentation will share information about food deserts in Madison County. How can access to healthy food options be increased, and why does it matter? What health disparities are residents who live in food deserts more likely to face? Local convenience store owners and their customers were surveyed about their attitudes toward increasing access to healthy food options. The findings of our research reveal the types of foods that store owners currently offer, what healthy foods they would consider offering, and the types of foods customers really want.

**Rebecca Butler, Daijaha Covington, Abigail Harty, Brooke Hudson, Khloe’ Rowe**

*Venturing Into Hope: Lesson Learned From the Women of The Next Door and Thistle Farms*

This will be a presentation of the MHU spring break mission team that travelled to Nashville, TN, to serve, work alongside, and learn from women who have been abused, addicted, homeless, incarcerated, or trafficked. How do women end up in these situations? What issues are unique to women in these cases? Why should other women care?

## Student Liberal Arts Mosaic ... of Research, Performance, and Creativity

### **Savanna Clark**

#### *Language Brokering and its Effects on Parental Roles*

“Language Brokering” occurs when a child must interpret for their parent after a family immigrates to a new country. Previous studies have indicated that language brokering can have positive and negative impacts on children. However, few studies have been conducted to develop a better understanding of how language brokering affects the parent’s self-esteem or role as caregiver. The present study aimed to gain a better understanding of Latino parents’ feelings towards language brokering and how it impacts the family dynamic. In order to participate in the study, parents had to speak primarily Spanish and have one or more children who spoke English and Spanish, and interpreted for them in public settings. Five Latino mothers were recruited and interviewed with the help of an interpreter. Through open-ended interviews, five identifiable themes were found: independence, cultural drifting, stress/frustration, hope, and pride.

### **Amber Demasio, Erin Francey, Nathan ones, Cameron McDaniel, Trenton Miller, Jacquelyn Miner, Daniel Nelson, Corey Pettigrew**

#### *Playing for Pay: Athletics and Academics*

In this presentation, the Mars Hill Ethics Bowl Team will simulate an Ethics Bowl Competition Round by presenting main arguments, asking and responding to questions, and summarizing arguments with closing statements. We will have judges that score each team based on the quality of argument, teamwork, and professionalism to determine a winner. This year the case will be on the subject of paying college athletes and the implications for student-athletes, the NCAA, and higher education. The ethical frameworks used will be rooted in FYS courses and explored in a lively debate session. We hope to shed some light on a timely subject in a way that is informative and entertaining.

### **Tricia Ellis**

#### *A Bronte Hierarchy of Needs: Using Ecocriticism to Self-Actualize*

In order to self-actualize, an individual has to be in an environment that is conducive to that process. But what does it mean to self-actualize? What kind of environment aids the process? Not everyone is able to reach full potential, and the same is true for fictional characters. Charlotte Bronte and Emily Bronte write about characters who enter environments that hinder their self-actualization. *Jane Eyre*, written by Charlotte Bronte in 1847, tells the story of one female who is able to reach her full potential but only after she creates the perfect environment for herself. This presentation discusses the environment that Jane needed in order to self-actualize.

### **Tricia Ellis, John Perron, Megan Shiflett, Daniel Spurgin**

#### *Cadenza: Thinking Back and Looking Forward*

Have you ever wondered what kind of creative flair was resonating at Mars Hill College back in the 60s? How about the 80s? Since this is the 50th year that *Cadenza* has been in action, let’s take a look at what Mars Hill students were creating back then and what Mars Hill University students are creating now. Today we are going to recognize the creativity that has emanated from past students, and we are going to celebrate the innovation of current students through their work in poetry, prose, and various mediums of art.



## **Shelbie English**

### ***The Serpent of the Flower: Faulkner's and Hemingway's Representations of 1920s Women***

"The Serpent or the Flower: Faulkner's and Hemingway's Representations of 1920s Women" is a feminist critique of two important twentieth century novels and their lead female characters: Caddy Compson in *The Sound and the Fury* and Brett Ashley in *The Sun Also Rises*. Faulkner and Hemingway designed their female characters to serve a purpose—to exemplify their time period and to present versions of the Lost Generation. Through the exploration of narrative style, cultural setting, and life circumstances, this study shows how two very male writers began to explore the changing female dynamic that took hold in society during the 1920s.

## **Steven Green, Chelsea St John, Annie Tesh**

### ***"Putting It Together" – The Pulitzer Prize Winning Musical in the 21st Century***

The Pulitzer Prize is awarded to literary works dealing with distinct American themes. The musicals presented, *Rent* and *Next to Normal*, are both winners of the Pulitzer Prize for Drama. While entertaining, these two musicals, take broken characters that symbolize relatable everyday people. *Rent* tackles contemporary themes demonstrating the battles that come with drugs, HIV/AIDS, homosexuality, and its effects on the community. *Next to Normal* portrays a family torn apart by death and mental illness and coping through the treatment process. Both musicals show heart-breaking journeys where people come together as a family; putting their pieces together. The objective of this arts break is to expose real hardships that Americans face through theatre. Enjoy the show!

## **Maslyn Greene**

### ***Companion Animals: A Home Away From Home***

This research examines the positive impact that companion animals have on individuals and society in general. Companion animals reduce anti-social behaviors, encourage human interaction and ameliorate triggers of depression and causes of other physical and emotional illnesses. The research focuses specifically on the effects of companion animals on the emotional and social problems often experienced by college-aged students and suggests that the presence of companion animals in a college environment may reduce disciplinary incidents, increase student academic achievement, create a sense of community among college students and promote retention. Other small, liberal arts post-secondary institutions have instituted companion animal policies with guarded success as the programs are in nascent stages. Qualitative research of the institutions reveals that they report several positive effects of the policies and hope for their expansion. The investigator proposes that a similar program could be implemented at Mars Hill University and will sketch a proposal for consideration by faculty, students and administration.

# Student Liberal Arts Mosaic

## . . . of Research, Performance, and Creativity

### **Trisha Halsey, Kevin Trudell**

#### *Environmental Effects on the Growth Rates of Fresh Water Fish*

Thermal pollution is a rise in temperature that comes from factories and power plants. Pharmaceutical pollution in our area comes from the large amounts of farm land with synthetic hormones and municipal wastewater. Exposure to estrogen-like chemicals is known to stimulate the production of vitellogenin (egg yolk protein) in fish, which has the potential to reduce growth rates. The purpose of our research is to determine if these two factors combined will affect the growth rates on freshwater fishes. In this experiment, fathead minnows were placed in 6 tanks at three different temperatures, one tank in each group was treated with estradiol. Body size was measured at the beginning of the experiment and again after 6 weeks to determine if growth had been affected. We also analyzed tissues from the fish exposed to estrogen to determine if exposure to estrogen stimulated production of vitellogenin in males.

### **Anjelika Kidd**

#### *Microhabitat Use by Migrating Songbirds in the Southern Appalachian Mountains*

Habitat loss and degradation are current threats to biodiversity globally as well as in Southern Appalachia. Over 200 species of birds are found in this region throughout the year, many of which are sensitive to habitat changes. My research intends to provide a better understanding of how fine-scale differences in habitat, that is the physical structure of trees and shrubs, influence Neotropical migrant songbirds during the fall migration season. Utilizing capture data from 19 net locations on Little Bald Mountain during migration in 2009-2013 and remotely-sensed LiDAR data used to quantify vegetation structure, I test the hypothesis that the density and height of vegetation influences fine-scale habitat use by birds. This presentation will inform students about the biology of migrant birds, a set of research techniques employed in wildlife biology, and the potential uses of fine-scale habitat data to inform conservation strategies to protect species.

### **Thomas Mason, Ryan Ray**

#### *Mathematics and Art: The Fibonacci Sequence, Golden Ratio, and Fractals*

From the finite to the infinite, elements of mathematics can easily be found in art. Through research, it can easily be shown that the Golden Ratio and the Fibonacci Sequence are prevalent in art and nature. These concepts appear in Roman architecture, various other works of art, and through patterns that can be found in plants and physical phenomena. The Golden Ratio and the Fibonacci Sequence can be observed by everyone as part of the perception of beauty and proportionality. Mathematics and art also meet at infinity. From the infinitely iterative, self-similar fractals discovered by Benoit B. Mandelbrot, to the illusion of the infinite loop found in the art of M. C. Escher, there is great beauty in infinitude. In this presentation we plan to explore the intersection of mathematics and art that occurs in viewing the Golden Ratio, Fibonacci Sequence, and with regards to infinitude.

**Jacquelyn Miner*****“I Trust You, Tell Me How to Vote”***

The idea of democracy is that the government is constructed by the people, for the people. Given that every citizen is different, how do we find representation that truly reflects the wishes of all of the people? The decision is made through voting for the candidate that best fits their ideals and desires. Given that not all people have a large interest or a knowledge base for politics, many people may turn to convenient ways to help them cast their vote. Many people may cast their vote based upon which party identification letter is next to the candidate's name on the ballot. Because there are two main parties in the United States that voters identify with, a diverse population narrows its ideals down to red or blue. This leaves little room for representation of all of the people. Because of the two party system, there is a disconnect between elected officials and the people that they represent. This is leading to the weakening of democracy because citizens are unable to properly hold their elected officials accountable through informed voting.

**Keri Oxendine*****Your Hands Give You Away***

Can athletic ability be determined by a physical feature? Is there any stock in urban legends predicting dominance and athletic ability? Are right-handed people more likely to be athletic? Can your ring finger to index finger ratio predict your choice in major? These are some of the questions that were explored in this study. The diverse student population at Mars Hill University presented a rich study group for addressing these questions, and more than 250 students participated. This study looked for a correlation between ring finger to index finger ratio with athletic ability, gender, second toe dominance, hand dominance and major preference. Come hear the unexpected results of the study.

**Isaac Phyll*****The Color of Justice: The History and Importance of Minorities in American Policing***

With the recent incidents of police shootings of unarmed minority youth, the media and the public are expressing concerns about the relationship between the police and local communities. Sir Robert Peel, recognized as the father of community policing, coined the phrase, “The police are the community and the community are the police.” The recognition by Peel in the 19th Century is no less true today; it is critical that community policing models work to ensure diversity among the workforce in a way that closely mirrors the population they are policing. The purpose of this paper is to synthesize the literature on the subject of entry into policing by African-Americans, to address the barriers encountered by African-Americans who sought to enter the world of policing, and to discuss the implications associated with a failure to ensure adequate representation of African-Americans in American policing.

# Student Liberal Arts Mosaic

## . . . of Research, Performance, and Creativity

### **Ansley Ricker**

#### *Quorum Sensing: Mechanisms and Relationships to the Future of Antibiotics*

We have all been sick; therefore, we have all desperately wanted medicine to make us feel better. More specifically, we have all turned toward antibiotics to fight those bacterial bugs that have made us feel so puny. Luckily, at the time, the antibiotics worked. Now, however, resistance to those antibiotics we all know and love is becoming an enormous, leading problem across the globe. Quorum sensing is cell to cell communication amongst bacteria—it is how bacterial cells talk. Studying quorum sensing and finding ways to both hinder and enhance this communication will allow us to avoid this emerging world problem of antibiotic resistance. In my presentation, I will be exploring quorum sensing, its mechanisms, its current applications, and how this exploration can lead to a future of more potent and effective antibiotics and, in turn, a healthier you and me.

### **Terris Jakobi Scroggins**

#### *Optimization of a High Performance Liquid Chromatography (HPLC) for the Determination of Imidazole in Surface Waters as an Indicator of Straight Piping*

The presence of fecal coliforms in water indicates that the water has been contaminated by mammal feces. Human waste, domestic animal waste, and wild animal waste all result in the presence of fecal coliforms in water. In order to reduce human pathogen contamination of water, knowledge of the fecal coliform source is needed. The purpose of this research was to develop a relatively inexpensive method for identifying coliform sources to a water body. Optical brighteners are relatively large organic molecules added to laundry detergents to give clothes a cleaner appearance after washing. The presence of optical brighteners indicates human waste has entered a water body. High Performance Liquid Chromatography (HPLC) is an analytical method used to determine how much of a large organic molecule is present in a solution. Imidazole is one of several compounds used as an optical brightener in laundry detergents. The goal of this research was to develop an HPLC procedure for the determination of imidazole in surface water

### **Sharon Sotelo**

#### *Living in the Shadows: A Look at the Lives of Mexican-American Families*

Imagine the word “undocumented.” What face comes to mind? What does it feel like? Why do they do it? Many cannot relate to the word and never- the- less have interpretations of what it means to be “undocumented.” North Carolina’s Hispanic population ranks 11th in the United States in 2010 (Mann, 2011). Yet there is little known about who they are or where they come from, why they left their country and what they are looking for in the US. Allow us to take a visual trip to Mexico and step into the shadows of the lives of Mexican American families. Discover what their world is like by looking at the issues they face, including a history of living in poverty and current policy struggles that create challenges to moving forward. Take a chance at understanding what it is like to be a first generation Mexican-American.

**Amethyst Strivelli*****Community-based Creativity: Appalachian Women as Catalyst for Sustainability and Change***

Most creativity research focuses on ideas from people who have changed the world such as DaVinci, Darwin, Edison, or Einstein. While this is important, it doesn't help us understand everyday, real-world problem solving. This project focuses on "Community-based Creativity" which is the type of problem solving that happens on a local level. The focus was on evidence of community-based creativity from the Ramsey Center archives including: 1) reflections about individual creative processes and 2) reflections about how creative contributions from individuals, and in particular women, changed Southern Appalachian communities. With this information, I will compare and contrast Community-based Creativity with large-scale creativity. My main goal will be to identify similarities and differences between these types of creativity. A secondary goal will be to offer insights about how Community-based Creativity supports a community, and how it can be cultivated within a community.

**Kristen Faith Trammell*****Personal Trainer? Self Efficacy? What's In It For Me?***

"Do I need a personal trainer?" How many of you will exercise on your own? This presentation shows how having a personal trainer "coach" you, being committed, and the exercise itself can increase your self esteem and self efficacy. Many people find reasons not to exercise. Time is the most common excuse that people use to skip physical activity. What if I told you that you do have time for exercise even if you have a full load of classes, extracurricular commitments, and a part-time job? Personal Trainers can help you discover the reasons, including the time, to exercise so that you can obtain not only the physical benefits, but the mental and emotional benefits as well. Let me show you how!

**Alexandria Wilson*****Glucose as a Targeting Molecule of Infectious Agents to Deliver Silver Drugs to Kill Bacteria***

Silver is used as an antimicrobial which can help reduce the bacteria cells in a body. In this experiment, I synthesized a silver carbene complex with glucose attached to a nitrogen atom. It is believed that by attaching a sugar moiety to the silver carbene complex it can be targeted to the bacterial cells, as sugar is a food source for the bacteria. Once targeted to the bacteria, the silver can kill the bacterial cell. The effectiveness of the N-heterocyclic carbene (NHC) will be tested against a gram positive and a gram negative bacteria to determine its' antimicrobial capabilities compared to other silver NHC's. The purpose of this experiment was to replicate previous experiments but use glucose instead of the R groups previously tested to examine whether saccharide-incorporated NHC complexes are useful for the development of new catalysts and drugs.

# Student Liberal Arts Mosaic

## . . . of Research, Performance, and Creativity

### **Kate Wright**

#### *Psychological Effects of Advertising on Nutrition Decisions*

This research project is intended to investigate the influence of realistic versus ultra-thin images on decision making related to health and nutrition. Research shows that advertising is a potent tool used to influence body image and healthy eating decisions. Advertisers are able to change people's buying behavior and how people feel about their purchases. This research was conducted in Pittman Dining Hall over the course of four nights by a researcher blind to the study and its hypothesis. The results support the overall hypothesis that changing the advertising to an ultra-thin image had an effect on the number of people that approached the nutrition table.

## THE SLAM COMMITTEE

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Richard Seagle  
Brian Tinkel & MHU Percussion Ensemble  
The dedicated Students, Staff, Faculty, and Friends of Mars Hill University

## NOTES

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NOTES



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# The Plenary Speaker

## Neil Anderson-Himmelspach



Neil Anderson-Himmelspach (b. 1976) has been playing bass professionally since the age of 17. After playing in many rock bands and working as a studio musician for several years, he chose to become serious about music composition. While playing in bands and working in the studios, he received his Bachelors of Music in Composition from Pacific Lutheran University in 1999. At PLU he studied with Dr. Gregory Youtz and David P. Robbins. Neil received his masters in music composition from Central Michigan University in May 2006. At CMU he studied with Dr. David Gillingham and Dr. José Luis-Maúrtua. Additionally, in 2005 Neil studied with Ladislav Kubik in Prague, at the

Czech-American Summer Music Institute. Neil received his doctoral degree in music composition at Florida State University, where he received the Graduate Teaching Fellowship for the 2006-2007 school year. His teaching duties at FSU included freshman and sophomore theory and aural skills and a composition studio. Neil received the FSU Outstanding Teaching Assistant award for the 2007-2008 school year. At FSU he studied composition with Ladislav Kubik and Mark Wingate. Neil has also taken composition lessons with Pulitzer Prize winning composer, Ellen Taaffe Zwilich. Neil is currently teaching music theory, electronic music, composition, and the history of American popular music at Harford Community College in Bel Air, Maryland. In the fall of 2015 Neil will be joining the music faculty at Texas Christian University in Fort Worth, Texas as the Assistant Professor of Music Technology and Theory and Composition. Neil has had his music played throughout the United States and Europe. His composition for solo alto saxophone, *Vanguard*, was a featured piece at the 2006 World Saxophone Congress. In 2007 his *Symphony No. 1* was performed at the Southwest Regional College Band Directors Association conference in Kansas City. His published works include *Salvador Dreams*, a euphonium concerto with wind band accompaniment, *Vanguard*, *McHenry's Anacreontic Song*, and *Symphony No. 1*. Neil was awarded the Individual Artist Award in Music Composition by the Maryland State Arts Council for 2012. Neil has received an ASCAP Plus Award in 2013 and another Individual Artist Award in Music Composition by the Maryland State Arts Council for 2014. Most recently Neil was awarded the Citation for Most Outstanding Graduate Alumni by the Florida State University College of Music in the fall of 2014.



# SLAM

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STUDENT LIBERAL ARTS MOSAIC

DESIGN BY: DANIEL SPURGIN