#### East Tennessee State University

#### Digital Commons @ East Tennessee State University

#### Illuminated

Magazines and Newsletters

Spring 2019

#### **Illuminated Magazine**

School of Graduate Studies, East Tennessee State University

Follow this and additional works at: https://dc.etsu.edu/illuminated

Part of the Higher Education Commons

#### **Recommended Citation**

School of Graduate Studies, East Tennessee State University. 2019. Illuminated Magazine. Volume 8. Issue 1 & 2. Johnson City, TN: East Tennessee State University. https://dc.etsu.edu/illuminated/16

This Book is brought to you for free and open access by the Magazines and Newsletters at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Illuminated by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.

# Uliminated

# magazine

## **Graduate Student Research Magazine**

ETSU SCHOOL OF GRADUATE STUDIES Fall 2018 - Spring 2019 Volume 8, Issues 1 & 2

# STAFF



### EDITOR

Dr. Karin Bartoszuk Associate Dean, School of Graduate Studies

**ETSU Photographic Services** University Relations Jennifer Brothers

# FROM THE SCHOOL OF GRADUATE STUDIES

The East Tennessee State University School of Graduate Studies is proud to present Illuminated, a magazine that showcases the excellent work of our graduate students and their faculty advisors. There are over 2200 students enrolled in graduate programs at ETSU. Illuminated presents some of our students' research and creative works that make meaningful contributions to various disciplines, and contribute to our strong graduate programs. Illuminated features research and creative projects that are currently happening on campus, and provides updates on alumni of ETSU graduate programs.

Sharon James McGee, PhD Dean

Karin Bartoszuk, PhD Associate Dean

INNIN

Scott Kirkby, PhD Associate Dean

East Tennessee State University is accredited by the Commission on Colleges, Southern Association of Colleges and Schools to award baccalaureate, masters, specialist, and doctoral degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097, telephone 404-679-4500, or Website: www. sacscoc.org with any question regarding the accreditation of East Tennessee State University. ETSU is an AA/EEO employer. ETSU-GRAD-0008-18 100

### WRITER Kathleen Tatro Epidemiology, M.P.H.

#### PHOTOGRAPHY

DESIGN Emily Redd, M.F.A. Thesis/Dissertation Coordinator, School of Graduate Studies

# CONTENTS

10 Where are they now? Featuring: Rob Cantor & Dr. Sharon McGee

12 Letters from the Past Emily Lu, M.A. History **18** Research Grant Recipients, 2018

20 W. Fea Ma

Where are they now? Featuring: Ernest Eugene & Matthew Harrison

6

From the School of Graduate Studies 14

Where are they now? Featuring: Maura Bishop & Bradley Marshall

8

Going All In Dr. Matthew McGahey, Ed.D. Global Sport Leadership



Empowering Students to Take Control Ziyad Alrumayh, M.Ed. Special Education 22

A Link to Your legacy Lee Ann Davis, Director for University Alumni Programs



Where are they now? Featuring: Tiffany Hogan & Thomas Roddy

26

Understanding the Value of Identity in Healthy Behaviors Byron Brooks, Ph.D. Psychology

28

Where are they now? Featuring: Lindsay Toman & Shelby Morris

30

Necessity, the Mother of New Understanding Jack Hartsell, M.S. Mathematical Sciences



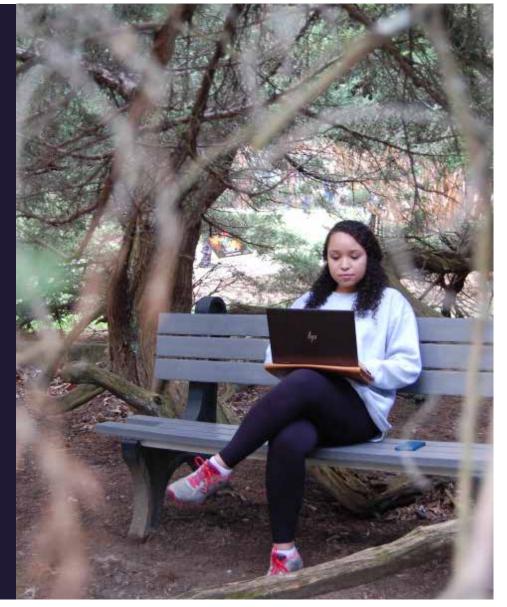
Narrators of Grief; Giving Nigerian Widows' Voice Esosa Mohammed, M.A. Liberal Studies

## GRADUATE STUDENTS & ADVISORS

Are you excited about your research and would like to share your hypothesis or findings?

YOU MIGHT BE A PERFECT FIT FOR *ILLUMINATED*.

There is more than one way to get into the next issue of the magazine!



#### • For current graduate students and their advisors:

Are you or one of your graduate students working on a culminating experience (e.g., thesis, dissertation, capstone)? Your research could receive additional exposure through *Illuminated* magazine and help educate the rest of the campus about your department and program. This is a unique opportunity to get your work recognized!

#### • For current graduate students and their advisors:

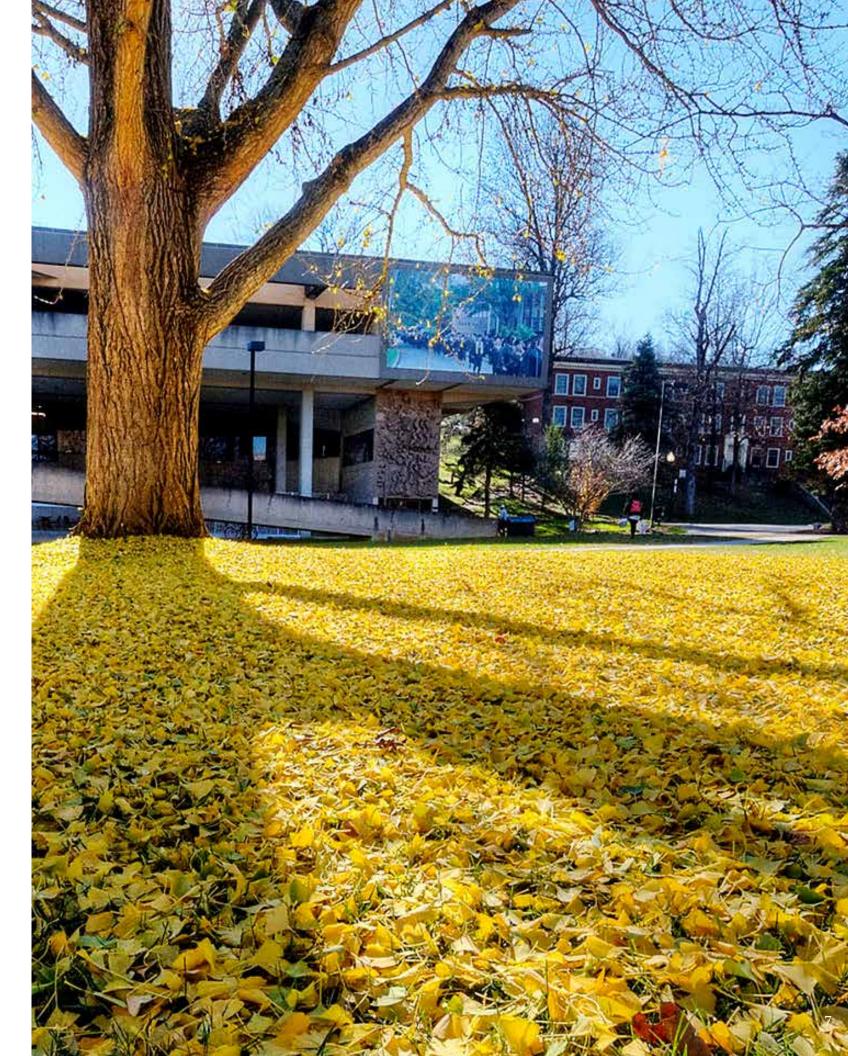
Did you or one of your students get into an excellent doctoral program or get an excellent position? We want to hear about it! Share your story in the "Where Are They Going?" section.

#### For former graduate students and their advisors:

Do you know an outstanding student who graduated from ETSU more than a year ago? We want to hear from them! The "Where Are They Now?" section features former ETSU graduate students who are now professionals in positions across the country.

#### Click here for Nomination Form: <a href="https://www.etsu.edu/gradstud/documents/illuminated\_nomination\_form.pdf">https://www.etsu.edu/gradstud/documents/illuminated\_nomination\_form.pdf</a>

For more information on nominating students or getting featured in *Illuminated*, please contact: Dr. Karin Bartoszuk, <u>bartoszu@mail.etsu.edu</u>



## GOING ALL IN by Kathleen Tatro

r. Matthew McGahey began his career in higher education as a student athlete playing baseball at Virginia Tech. As a competitive athlete, Dr. McGahey had aspirations and ambitions to play in the postseason and potentially win a championship, so he made the decision to transfer to ETSU and join the Buccaneer baseball program. This choice would come to shape the next decade of Dr. McGahey's life in ways he could not yet imagine.

After transferring to ETSU in his junior year, Dr. McGahey earned his Bachelor's degree in Criminal Justice; followed by his Master's degree in Sports Management. As a graduate assistant in the External Operations office, Dr. McGahey's work ethic and attention to detail did not go unnoticed. After graduation, Dr. McGahey was hired as the Assistant Director of Development for the ETSU Athletic Department. Dr. McGahey then began to wonder how he could continue to grow as a scholar and member of the athletic community. During his time as an athlete, graduate assistant, and full-time employee, Dr. McGahey formed a close friendship with Dr. Brian Johnston. Seeking to differentiate himself from peers in the world of external operations, Dr. McGahey joined the inaugural class of the Global Sport Leadership program. The Global Sport Leadership program is designed to develop the next generation of leaders and visionaries in the highly competitive world of sports. Dr. McGahey's passion for sports and the flexibility of the program made his choice a simple one.

In the developmental phase of his research focus, Dr. McGahey found in his review of the current body of scholarly literature a need and an opportunity to generate new concepts for increasing brand recognition in mid-major sporting events. Dr. McGahey was inspired by his class trip with Dr. Johnston to Munich, Germany for a sporting event, a key factor in the Global Sport Leadership program, to determine how sponsors engage and network through athletic marketing. He wanted to apply these practices in marketing and sponsorship to maximize

sponsor brand recognitions at athletic events, while maintaining the highest level of customer service for corporate sponsors. Dr. McGahey's goal was to create true partnerships with maximum return for both parties, as well as help with retention of current business partners and recruitment of new corporate partners.

Dr. McGahey wanted to answer the questions of what brands attendees recognized as sponsors of athletics at mid-major basketball games, and were there specific points of activation or types of branding that caused a higher rate of recognition. He hoped to illustrate to current and potential business partners, which points of activation would generate the best recognition for their brand when it came



to marketing at sporting events. Points of activation included assets such as video, audio, signs, etc., that are used to advertise sponsor businesses. His study looked at three specific subgroups of event attendees: (1) season ticket holders, (2) single ticket buyers, and (3) students. The sample was drawn from volunteers at three sold-out games hosted in a local arena. Twelve iPads were distributed across the venue starting one hour prior to the game and at halftime. Samplings occurred at games in December, January, and February. The study sample size was 616 participants after sampling was complete. The survey included 17 sponsors, and asked respondents to identify themselves into one of the three respondent categories, which brands they recognized as corporate sponsors, and points of activation (i.e., where logos were recognized within the arena, such as decals, signage, game programs, video, and audio).

Dr. McGahey found that season ticket holders showed the highest rate of sponsor recognition, which he believed is due to their increased investment and loyalty in sporting events. The second highest subgroup were students. This may be in part due to crossover, i.e., sponsor advertising in multiple sporting arenas. Dr. McGahey found that increased time and exposure was a factor in sponsor recognition. Results showed increased sponsor recognition from attendees in February versus December or January. Initial results showed several methods of increasing sponsor recognition at mid-major basketball games. Dr. McGahey also found the best way to increase recognition was to add more points of activation across

with a sponsor's brand and recognition.

Dr. McGahey recently presented his findings at ETSU's corporate sponsorship meeting. Currently, he has plans to present at the National Association of Collegiate Directors of Athletics meeting, and the European Association of Sports Management. He is applying his research to his career daily in the Department of Intercollegiate Athletics as the Senior Associate Athletic Director of External Operations. Arguably one of the most



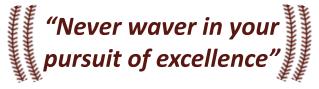
important aspects of graduate education is the relationships formed between students and mentors. Dr. McGahey met Dr. Johnston when he began playing baseball at ETSU in 2007, as Dr. Johnston was the athletic trainer at the time. Dr. McGahey says that Dr. Johnston is a people person who gave him every chance to be successful. He not only motivated, but he inspired Dr. McGahey to be the best he could be. Dr. Johnston contends that Dr. McGahey helped him grow as much as he helped Dr. McGahey become the academic

the venue. Higher rates of brand recognition were associated with increased investment in multiple points of activation or official sponsorship. Sponsor brands with the least recognition had only one point of activation and were not in a prominent area in the venue. Color was also determined to be a tool to differentiate between sponsors by creating an association



and professional he is today. Their relationship today transcends academic mentorship, and they have become colleagues as well as personal friends.

Dr. McGahey's next great ambition is to become an athletic director. He believes that his degree in Global Sport Leadership sets him apart from other candidates. He also hopes to have helped establish a foundation for future Global Sport Leadership students



to aspire to great heights, and strive to become better as students and professionals.

Dr. McGahey would offer this advice to current and future graduate students: To go all in, and never say no to an opportunity, because you never know where it may lead you. In life, Dr. McGahey contends, you need to search for your passion, and when you find it you should never waver in your pursuit of excellence. Most *importantly, do not let fear dictate* your choices. 🔳

where are they now. Rob Cantor M.A. in Teaching // ETSU Department: Curriculum and Instruction // 2012

Why did you choose ETSU for your education? I chose ETSU because my brother graduated from ETSU, and it is close to home.

What is your current position? I am a 7th and 8th grade Math Teacher.

What does your current position entail?

Mentoring middle school students, teaching math, planning daily lessons, sponsoring 8th grade field trips and end-of-the-school-year activities.

How did your time at ETSU prepare you for your career?

Coming from the Army, I had to learn a lot about education, and how to navigate obtaining my teaching license. ETSU was with me every step of the way; guiding me, mentoring me, and making sure I was on track.

What advice would you offer current or future graduate students? Ask plenty of questions, show up on time, work hard, and good things will happen.



What does your current position and research entail? As Dean of Graduate Studies, my job is to provide a vision and leadership for graduate studies at ETSU. Graduate Studies has a macro-level view of issues related to graduate education. In terms of my scholarship, my latest long-term project was wrapped up before I arrived here; that was a book-length work co-authored with Dr. Joanne Addison at University of Colorado-Denver that examines the impact of testing and accountability movements in education on best practices in the teaching and learning of writing. We argue that Common Core State Standards is an opportunity for a vertical writing curriculum from kindergarten through college that builds incrementally to potentially improve writing. This potential is dependent upon collaboration between elementary, secondary, and post-secondary teachers working together and administration that supports collaboration and vertical integration of learning.

How did your time at ETSU prepare you for your career? I would not be where I am today without my time at ETSU. I had incredible faculty who helped me find my scholarly passion and who encouraged me to go on for my Ph.D. Because of their support and encouragement, I applied to some of the top programs in my field and was accepted. Being in a top doctoral program set me up for opportunities that have opened doors in my professional journey.

What advice would you offer current or future graduate students? Two pieces of advice: There are few times in life when one can take the time to engage fully with ideas. That's a wonderful aspect of graduate school. Often when one is in the midst of graduate school, there is so much reading and research to do that we can't fully absorb it all. I used to tell my graduate students that if I could go back to graduate school now, having done all the reading and having had time to really think about it, I would be a star. Enjoy the opportunity to learn. Second, everyone-and I mean this sincerely-every graduate student feels like an imposter at some point, like they are not smart enough to be in graduate school. When you feel like that, talk to someone and don't let that feeling paralyze you.

## Dr. Sharon James McGee M.A. English // ETSU // English (now Literature and Language) // 1991

Why did you choose ETSU for your education? Honestly, I chose ETSU because it was convenient. I had graduated from UT with my B.A. in English and took a job that was not a good fit for me. I was fortunate that my parents, who saw how miserable I was, told me I could move home and start graduate school to figure out what I wanted to do. I applied to ETSU because it was in my hometown, which turned out to be a great decision.

#### What is your current position?

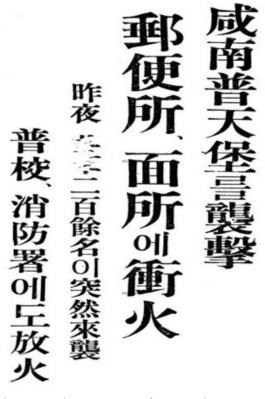
I am Dean of Graduate Studies and Professor of Literature and Language at ETSU. Before coming to ETSU as Dean, I had been Associate Dean of the Graduate School at Western Carolina University, and prior to that a faculty member (and later department chair) in English Language and Literature at Southern Illinois University Edwardsville.

## LETTERS FROM THE PAST

by Kathleen Tatro

**E** mily Lu has always fostered a love of history, language, and academics. Emily obtained her B.F.A. from New York University in History and Dramatic Writing before living and teaching abroad in Japan for two years. During her time teaching in Japan, Emily had the opportunity to travel across East Asia and immerse herself in the culture. She was able to visit many important historical sites and relics, and this solidified her choice to return to school and to pursue a Master's Degree in History. Emily chose ETSU for her degree, because of the exceptional faculty, specifically Dr. Henry Antkiewicz, whose research in Chinese and Japanese history excited Emily.

Based on her time abroad and interest in language, Emily decided to focus her thesis on a comparative history in the development of Korean and Japanese languages and their use or disuse of Chinese characters. Emily also hopes to examine literacy rates and aspects regarding brain function when looking at ideographic written language as opposed to brain function when reading alphabetic language. She hopes to develop an argument for or against the reintroduction of Chinese language education in Korean public schools. Chinese written language, unlike the Korean alphabet, is ideographic or uses characters to convey words and ideas. Emily conducted an initial historiography, or a study of historical writings, to determine why Korean language has eliminated Chinese characters, whereas the Japanese language has not. Emily began her thesis research with a literature review of scholarly articles in the time period surrounding the shift from a mixed Korean language using Chinese characters to a purely Korean language expressed through an alphabet. Scholars generally agree that the split occurred at the end of the Japanese occupation of Korea in 1945. Japan occupied Korea beginning in 1910, and during the occupation Korean citizens were not allowed to use their own language. This, in addition to a rise in nationalism at the end of World War II, led to the Korean government wanting to preserve



their language by removing foreign characters, and creating a completely Korean language. Emily hopes in her thesis to dig deeper and discover the hidden nuances and reasoning for the split beyond the ambiguous statements made by the government.

Emily also looked at the effects this transition to a purely Korean language has had on Korean citizens and found that the pro-Chinese camp of Korean citizens has argued that the shift from writing in Chinese characters is a disservice and has made those who were not educated in the characters less stimulated in intellectual development. The pro-Chinese camp also argues that the use of Chinese language allows for the efficient dissemination of knowledge to all East Asian nations who use Chinese characters. Emily found that there has been a significant shrinkage in the vocabulary of Korean language due to the removal of Chinese characters. In addition, having Chinese characters helps readers pick up reading speed. Arguably her most significant finding is that the transition has caused a disconnect and a loss of cultural understanding between generations. Youth of today's generation are, for the most part, unable to read dynastic writings,

and writings from previous generations. Some new translations of text offer supplementary Chinese characters in writings to help older generations read new literature, but for their children and grandchildren many of the characters mean nothing. Korea, unlike Japan, does not teach Chinese characters in compulsory education. However, many Korean parents are pushing their children to learn the Chinese language and its characters for business purposes.

The next step in her research will be an attempt to use primary sources. Emily hopes to be able to examine government briefs and documents regarding the schism, however this will likely be a challenge as they are not widely available in research databases. She

has begun comparing newspapers, textbooks, novels, and even street signs from the Japanese occupation and post-occupation Korea for evidence as to the reasoning behind the split, since the government has been very vague in its explanations for the transition. Emily hopes to add to the current body of literature not only with potential new motives for the transition, but also a more novel vernacular approach to historical research. Emily, ever the fastidious student, has already begun sharing her knowledge and findings with the academic community. First, she was a finalist in the ETSU School of Graduate Studies 3-minute thesis competition. Then, she presented in January at the Southeast Conference of the Association for



Asian Studies in Memphis, where she was a panelist.

Emily and her faculty advisor Dr. Antkiewicz have in a short time developed a strong working relationship, a key factor in the success of a graduate student. Dr. Antkiewicz is not only pleased to work with Emily, but in her cross-cultural research, which falls in line with his own research interests in Chinese and Japanese history. He commends Emily for her broad view of history and believes that she will contribute to the cognitive aspects of how language can be used through media. Dr. Antkiewicz truly believes that Emily is an asset to ETSU. Emily contends that Dr. Antkiewicz is an integral part of her growth as an academic; he has already pushed her to improve herself and given her the opportunity to cultivate herself as a scholar. She says that his seminar was the most progressive for her personally.

Emily hopes to travel to Korea in the near future to conduct hands-on research for her thesis. She plans to graduate in May of 2020, after which she hopes to pursue a doctoral degree. She hopes to continue and expand her thesis research to form her dissertation. Emily is interested in examining Chinese political structure, specifically the change from Imperial to Republican, and analyzing how the shift affected the people of China. Her ultimate goal is to become a professor, which was solidified by her time teaching in Japan where she discovered a passion for sharing knowledge and cultures.

M.S. Speech-Language Pathology // ETSU // 2012

#### Why did you choose ETSU for your education?

The speech-language pathology program at ETSU provided many different clinic opportunities, which allowed me to gain knowledge about the field from many different perspectives. The campus is also located in a great area. The faculty within the Audiology & Speech-Language Pathology department were always helpful and welcoming as I began researching graduate school programs.

#### What is your current position?

I currently serve as a speech-language pathologist for Grainger County Schools. I am also an adjunct professor at East Tennessee State University.

#### What does your current position entail?

I provide speech-language services for preschool to middle-school age students in a school environment. I evaluate and treat speech-language disorders, and participate in program planning activities with teachers and parents. For ETSU, I teach two online, undergraduate courses within the Department of Audiology and Speech-Language Pathology.

#### How did your time at ETSU prepare you for your career?

The education and hands-on experiences I received at ETSU provided a foundation of knowledge, which carried over to my work environment. I felt prepared and confident as I began my career. ETSU allowed me to grow as a student, clinician, and learner, which created my base knowledge for serving students, and helped me to become a continuous learner.

#### What advice would you offer current or future graduate students?

Throughout graduate school, soak in all the information you possibly can, and participate in as many educational and extracurricular activities as possible. It is also important to build relationships with fellow students and professors, so you can have resources as your career begins.



*What does your current position entail?* I instruct three sections of Foundations 2 – Intro to 3-D design, at Austin Peay State University with photography classes to follow. My current research reflects a sustained interest in American masculinity--a continuation of my Master's thesis, but now expanding my photographic practice to include working with sculpture, video, digital collage, and new media.

I explore elements of ritual and subculture within masculinity, and the coming-of-age narrative through a reflexive process relating to autobiography, memory, and nostalgia. My photographic work continues to inform these other mediums through my educational relationship to photography—I may have my own ideas in the beginning, but the photograph continually shows me what is most interesting.

#### How did your time at ETSU prepare you for your career?

The faculty and staff at ETSU's Department of Art and Design offered me valuable insight and feedback on the work that I was making through every step, leading towards my thesis. All faculty members that I worked with challenged me and my ideas around art. Mike Smith taught me invaluable lessons in thinking about photography and its potency as a medium. Tema Stauffer offered a nuanced and critical understanding on the formation of an exhibition and body of work.

#### What advice would you offer current or future graduate students?

Work incredibly hard; take advantage of space, materials, and like-minded individuals that you encounter while in graduate school. Pull everything out of your faculty and yourself. Make sure you leave room in your experience for change, growth, and surprise.

### Bradley Marshall M.F.A, Studio Art // ETSU //

M.F.A, Studio Art // ETSU // Art & Design // 2018

Why did you choose ETSU for your education? ETSU offered me the teaching experience that I desired while pursuing a Master's degree, and the department is reasonably small without any compromise in talent and esteem in faculty.

#### What is your current position?

I am currently working as adjunct instructor at Austin Peay State University in the Department of Art and Design.

# EMPOWERING STUDENTS TO TAKE CONTROL

iyad Alrumayh was born and raised in Saudi Arabia where familial ties inspired him to pursue a career in special education. After completing his training, Ziyad spent several months working in elementary schools there. However, he wanted to pursue further education to better understand the best-practice methods to support children with learning disabilities and behavioral problems to reach their full potential. Ziyad wanted the opportunity to leverage his experience in schools to enhance, and guide his research and academic pursuits. Ziyad chose to pursue his Master's degree in Special Education with a concentration in Advanced Studies in Special Education at the Clemmer College of Education at ETSU. This degree offers both research and field experience opportunities. The ability to spend his practicum hours in various public schools helped seal Ziyad's decision to pursue his continued education at ETSU.

Ziyad was interested in focusing on the Daily Behavior Report Card (DBRC), which he discovered during his literature review, a tool that teachers could implement to increase student engagement and help students identify and understand which behaviors were conducive to the classroom, and which were not. The DBRC is also low cost and high in time efficiency, making it easier to integrate into the classroom. Previous studies focused on the effectiveness of the DBRC, but Ziyad wondered if the tools and behavioral changes gained from DBRC could remain effective and allow students to take more responsibility for their behaviors after the physical DBRC was phased out.

Ziyad focused on first graders and their teachers in the public-school system for his study. His goal was to examine whether the DBRC was an effective tool in behavior management for teachers. Ziyad began by interviewing teachers to categorize which behaviors they deemed disruptive. His focus was on behavior modification through positive reinforcement through communication. There were four phases of Ziyad's study: (1) classroom observations to define a baseline for the data. To do this, Ziyad used a stop watch to time student engagement, i.e., when a student was focused and engaged in his or her work the watch would continue, but when the student was distracted or off task the watch would stop. Timing was confirmed by a second

observer with at least eighty percent agreement between the two measurements. (2) Introduce a physical copy of the DBRC, which was placed on students' desks. This allowed teachers to score students' behaviors in real time, and address those behaviors and how to improve on them immediately. The goal of the intervention was to increase student engagement to eighty percent; the national average is seventy-five percent. The DBRC would be used daily for about two weeks. (3) Remove physical copies of DBRC from student desks so that the baseline could be reestablished by Ziyad and his faculty advisor, Dr. James Fox. Initial results showed an increase in student engagement to eighty-five percent, and a decrease in disruptive behaviors when measured against the baseline. (4) The last phase of Ziyad's study involved reintroducing the DBRC, but decreasing its use from daily to weekly or bi-weekly. This

"I hope that this study will illustrate a lowcost tool that teachers can implement to give students autonomy over their behaviors in the classroom."



would allow Ziyad to measure the tool's effectiveness as it was being phased out of the classroom. They found that the level of student engagement was maintained, and that students were taking a more direct responsibility for their behavior during school.

Ziyad conducted poststudy interviews with the teachers and students. Teachers were asked to rank the tool and its perceived effectiveness as well as their knowledge, attitudes, and beliefs about the DBRC. On a scale from one to six, the participant teachers ranked the DBRC a five out of six, on average. These rankings show a high social validity, which by definition is the acceptability of and satisfaction with the intervention procedures, as well as a high self-efficacy, which is defined as the teacher's belief in his or her ability to properly use the tool. Ziyad also interviewed students post-intervention; these interviews focused on positive



From Left, Dr. Tina Hudson, Dr. Sara Beth Hitt, Ziyad Alrumayh, Dr. James Fox

reinforcement. Ziyad hopes that his study will illustrate a low-cost tool that teachers can implement to give students autonomy over their behaviors in the classroom.

Ziyad and Dr. Fox have formed a close mentorship through his time at ETSU. Ziyad appreciates Dr. Fox for allowing him room to grow and come to conclusions on his own time, as well as being supportive throughout the project and program. Dr. Fox, Ziyad believes, has helped him develop key critical thinking and teaching skills that will help him throughout his career. Dr. Fox says that Ziyad is incredibly hard-working and knowledgeable. To produce a study like this is difficult on its own, but Ziyad worked to complete this study while also completing his practicum hours. A feat by any standard, according to Dr. Fox.

Zivad traveled to Arizona in October to present his findings at the Teacher Educators for Children with Behavior Disorders conference. He also traveled to Nashville in November to the Tennessee Association for Behavioral Analysis conference to present. Ziyad defended his thesis in October of 2018 and graduated in December of the same year. Ziyad returned home to Saudi Arabia to work in special education and apply his findings in schools there. He aspires to pursue a Ph.D. in Behavioral Sciences.

# **RESEARCH GRANT RECIPIENTS 2018**



#### Rudy Chapman

Ph.D., Biomedical Sciences Tracing Olfactory Sensory Neuron Axonal Regrowth After Injury Dr. Diego Rodriguez-Gil, Committee Chair

#### Wesley Gill

Ph.D., Biomedical Sciences Epigenetic Mechanism of Nicotinic Effects within the Neonatal Quinpirole Rodent Model of Schizophrenia Dr. Russell Brown, Committee Chair

Benjamin Hall Ph.D., Psychology An Analysis of Moral Emotions in Predicting Attitudes Toward Suicide Dr. Jameson Hirsch, Committee Chair

Karen Hoefer M.A., Sociology Impact of Suicide Attempts on Quality of Life Dr. Martha Copp, Committee Chair

Esosa Mohammed M.A.L.S., Liberal Studies Exploring Resilience and Strength of Narratives in Nigerian Widows: An Interdisciplinary Analysis of Widowhood Practices in Nigeria Dr. Marie Tedesco, Committee Chair

Kelly Pugh Ph.D., Psychology Resiliency, Mental, and Physical Health, and Suicide Risk in Older Adults Dr. Jameson Hirsch, Committee Chair

Kent Scruggs M.S., Biology Gut Microbiota and Microglia Activation in Three Different Mouse Models of Autism Spectrum Disorder Dr. Michelle Chandley, Committee Chair

Ashlie Richard

M.A., History Civil War Medicine and Environmental Health in the 58th NC Infantry Dr. Steven Nash, Committee Chair

Amber Stanley M.S., Biology The Effects of Urbanization on Avian Seed Dispersal Success of Toxicodendron Radicans (Anacardiaceae) Dr. Gerardo Aceco-Gomez, Committee Chair



where are they now. Ernest Eugene Ed.D. in Global Sport Leadership // ETSU // 2018

#### Why did you choose ETSU for your education?

I chose ETSU for my education because of its Global Sport Leadership program. Specifically, the faculty, led by Drs. Richard Sander and Brian Johnston, has a vision that surpasses all programs of its kind. The experience that this program allows you to gain and the flexibility of being able to do 100% of the coursework online allow all working professionals to excel. The structure of the program also provides a platform for all students to be amongst the elite in their respective fields. There is no doubt that my experiences in this program have prepared me for my current position and continue to allow me the ability to excel. The program is the best in the country, and I recommend it to everyone. Thank you ETSU, and your Global Sport Leadership program for making me better!

What is your current position? Head Athletic Trainer for the Orlando Magic.

#### What does your current position entail?

In my current position, I have oversight of the medical entity within our organization.

#### How did your time at ETSU prepare you for your career?

ETSU has prepared me for my career by teaching me how to think and function like an effective leader. Specifically, it has taught me how to lead by example while also understanding emotional intelligence within our staff.

#### What advice would you offer current or future graduate students?

Take full advantage of what you are learning in the classroom by functionally applying it to your respective careers. Although grades are important, the most important aspect is the ability to functionally apply what you learn in the classroom to your work setting. This is what defines success.



I am a faculty member with the rank of Lecturer in the Department of Computing here at ETSU. I am continuing research with Dr. Karsai and Dr. Wallace into the decentralized decision-making processes of European paper wasps (Polistes dominula) with the goal of furthering the understanding of self-organizing biological systems. Our research extends the work from two of Dr. Karsai's previous publications on P. dominula nest building behaviors by designing and implementing a three-dimensional simulation of nest construction. The simulation serves as a framework for implementing a nondeterministic model of wasp behavior that weighs various nest properties as input for wasp decision making. Potential applications for our research include constructive artificial life systems and adaptive controllers for robotics.

## What does your current position and research entail?

I teach Operating Systems and Introduction to Computer Science II. I co-taught Math for Computer Science with Dr. Wallace this past summer and am co-teaching Computer Architecture with Professor David Tarnoff. I serve as the faculty advisor for student chapters of two international computing organizations: the Association for Computing Machinery (ACM) and the Institute of Electrical and Electronics Engineers (IEEE). I also serve as the faculty sponsor for Upsilon Pi Epsilon, the honor society for computing and information disciplines.

#### How did your time at ETSU prepare you for your career?

My time at ETSU provided me with a computer science education that has let me "hit the ground running" in my new role as a Department of Computing Lecturer. Like most graduate students, my thesis research taught me valuable lessons in time management and communication. Additionally, my thesis project instilled a deep appreciation for original thought and the processes involved in trying to contribute to human knowledge. I am grateful to Dr. Karsai and Dr. Wallace for letting me find my own way with my research, but still being supportive and, most of all, patient with me when I struggled to make progress on my thesis project. I also obtained a practical, hands-on education through my Graduate Assistantship with Information Technology Services (ITS) under the guidance of Beth Rutherford and George Peters. The Networking and Telecommunications units of ITS provided me opportunities to learn every day about enterprise-grade wired and wireless networking. My ITS experiences taught me to never take for granted all the hard work that goes on behind the scenes to support technology use at ETSU.

#### What advice would you offer current or future graduate students? I have three pieces of advice for ETSU graduate students:

1. Read The 7 Habits of Highly Effective People by Stephen Covey. Learn and practice those seven habits-they are essential to getting through graduate school.

2. Make a real effort to get to know your professors: they were once in your position. Listen to what your professors have to say. Ask for advice and feedback. Additionally, your professors know others that can provide you with interesting opportunities.

3. Take care of yourself—your health directly impacts your education. Get enough sleep. Remember to eat (and eat well). Exercise.

## Matthew Harrison

M.S. Computer and Information Sciences // ETSU // Concentration: Applied Computer Science Department of Computing // 2018

#### Why did you choose ETSU for your education?

I initially chose ETSU to earn a second Bachelor's degree in computer science. I already had a Bachelor's degree in biology, and I wanted to pursue what I had been doing for fun since I was a child: computing. I was attracted to ETSU's Department of Computing for its commitment to teaching, its student-faculty ratio, and its reputation for rigor. Four semesters into my second Bachelor's degree, Dr. Christopher Wallace, my algorithms professor, encouraged me to apply to the Department of Computing's graduate program. I heeded his advice and applied. I was accepted to the Department of Computing's graduate program starting in the spring semester of 2016. I chose to pursue my Master's degree at ETSU not only for the aforementioned departmental strengths, but also because of the two professors who would go on to co-chair my thesis committee: Dr. Wallace and Dr. Istvan Karsai (Department of Biological Sciences, ETSU). Dr. Karsai's research into the organization and decentralized decision-making of insect societies provided an interesting cross-disciplinary project that drew on both of my educational backgrounds.

#### What is your current position and research?

## **A LINK TO YOUR** LEGACY

by Kathleen Tatro

ach fall new students, alike, are welcomed onto campus and to Johnson City, heralded by the ETSU PRIDE signs. Do they know the ETSU National Alumni Association offers the chance to celebrate ETSU's past and embrace its future? An opportunity to create hallowed moments that will be remembered for decades to come? While some may believe the Alumni Association is meant only for alumni, the *Illuminated* staff sat down with Lee Ann Davis Director for University Alumni Programs and ETSU alumna, and found out about the many remarkable opportunities the Alumni Association has to offer. It is not often you meet someone whose exuberance and passion fills a room quite like Lee Ann Davis. It only takes a moment to recognize that Davis fiercely loves ETSU, its students, and alumni. Because of her desire to better serve the ETSU community, she enrolled in the Master of Professional Studies in Strategic Leadership program, where she graduated with a 4.0 GPA; was awarded the Grad School's first Service Project that Enhances the Public Good for her capstone project about servant leadership and was named Best Overall Grad Student by the School of Continuing Studies. Her passion and that of the Alumni Association



staff has led to the creation of a variety of programs which benefit both graduates and students.

Ninety years ago, graduates of ETSU, known at the time as diplomats, gathered the night before spring commencement to reminisce and celebrate a new generation of graduates. Their gathering was the beginning of the ETSU National Alumni Association, whose prestige and tradition would continue to flourish making it the longest continuously running association at ETSU since its establishment in 1915. The Alumni Association has spent nearly a century cultivating a network of alumni who work together to better not only their communities, but also to help ETSU prosper and flourish, so the next generation of scholars can arise. The Alumni Association today has over 90,000 members spanning the globe.

One exciting new venture for the Alumni Association is the Tradition Keepers, a student organization aimed at increasing student and alumni engagement in the ETSU community. Members distribute t-shirts at summer orientations, offer free tea on Tuesdays, and free rides with the possibility of prizes if your ETSU knowledge is up to par. The Tradition Keepers also offer students the chance to network with alumni in their disciplines through the Dinner with Ten Bucs program, and tailgate with fellow students and alumni at all home football games.

The Alumni Association works with former graduates to develop mentorships and contacts between current and former students. This program allows students to create lasting, meaningful relationships with a mentor who may help students gain

across the world. Graduates have the ability to renew strategies as they navigate their next steps, whether in membership yearly for a fee of \$25. One of the most cherished proceedings during spring commencement is the honoring of the Golden 50s. These men and women celebrate the 50th anniversary (or more) of their commencement with reunion festivities all weekend, then don golden caps and gowns on Saturday to lead in the current graduating class. Davis says, "this is another example of how the Alumni Association inspires current students to succeed and form their legacy, so that in time they too One of the largest events for students that *can become mentors, leaders, and inspiration to future* generations of Buccaneers." With Alumni chapters in Tennessee, Georgia, North Carolina, and the District of Columbia (and

continued education or finding employment. Along with the mentorship program, the Alumni Association schedules times for alumni to visit their past classrooms to share their experiences and triumphs with future ETSU scholars. Davis says, "the ability to see an ETSU *success story in person is highly motivating for many* students and serves as a reminder if you are willing to work diligently in the pursuit of your goals, anything is possible." the Alumni Association holds each semester is the Graduation Celebration. Students have the opportunity to visit with a range of experts who help them prepare for their first leap into life after school. Experts include many more planned), it is not difficult to venture out University Career Services to revise and refine resumes, into the world as a member of the ETSU National financial planners, and even etiquette teachers, all of Alumni Association, because not far off, there is whom share their knowledge with students as they pick another proud Buccaneer to help you find your way. up their caps and gowns.

Membership into the ETSU National Alumni Association is automatic for all graduating students. The first year of membership is free. Membership includes access to the online community, weekly newsletters, and an app for Access Development with over 350,000 discount offers including retail items, travel, and food. The Alumni Association also connects its thousands of members around the U.S. and the world through an online community where they can learn from each other and grow the ETSU community



RIDE

where are they now? Tiffany Hogan Master of Arts in Reading Education // ETSU // Department of Curriculum and Instruction // 2011

#### Why did you choose ETSU for your education?

As a first-grade teacher in a high-poverty school, I felt compelled to accelerate my students' reading growth, but I lacked the expertise to do so effectively. I needed knowledge, and the ETSU M.A. in Reading program had a valuable reputation within my school.

#### What is your current position?

I am a literacy coach in Johnson City Schools. I am also currently serving on the Tennessee Department of Education's (TDOE) Early Literacy Council, and as a TNReady Ambassador for the State's testing program.

#### What does your current position entail?

I support teachers in my district as a resource provider, data coach, curriculum specialist, mentor, and a learning facilitator. I am partnering with TDOE and its testing vendors to advise and improve literacy initiatives and testing programs in Tennessee.

#### How did your time at ETSU prepare you for your career?

ETSU provided me with the literacy content knowledge and skills I need to successfully support teachers as they meet the diverse needs of their students.

What advice would you offer current or future graduate students? Continually seek out opportunities to grow professionally in the service of others.



counted as one of the top 5% highest quality business schools in the world. I correctly thought that even though ETSU was located so close to my hometown, it was also my gateway to business opportunities all across the globe. The student bodies in both my programs were very diverse; I had classmates who were from many different states in the U.S., but also from many countries in South America, Asia, Africa, all across Europe and the U.K.

#### What is your current position?

I'm a Compliance Risk Manager at Bank of America. I maintain compliance oversight functions over the Retail, Consumer, and Small Business Banking Lines of Business.

#### *What does your current position entail?*

There are many goals for which we strive that compete for my attention. The most prominent are: 1) Ensuring Bank of America is compliant with all laws, rules, and regulations, which relate to AML (Anti-Money Laundering) and Global Economic Sanctions, 2) Continually critically assess the efficacy of employees and processes, which have frontline roles in protecting the bank from criminals, and 3) Maintain cutting-edge knowledge of global financial threats, which can affect the bank; to creatively think like a criminal and attempt to close gaps in Bank of America's armor before they can be exploited.

How did your time at ETSU prepare you for your career? ETSU prepared me for my career primarily by providing classes with professors who encouraged me to have high expectations for myself and to be resilient in the face of adversity. Life, in general, can be very difficult. ETSU helped me mold myself into someone capable of facing great adversity, academic and personal.

What advice would you offer current or future graduate students? "To succeed in life, you need two things: ignorance and confidence." - Mark Twain "Beware of the man who works hard to learn something, learns it, and finds himself no wiser than before." - Kurt Vonnegut

## Thomas Roddy

Master of Business Administration // ETSU // Department of Management and Marketing // 2015

Why did you choose ETSU for your education? I chose ETSU for both my undergraduate and graduate degrees in Business Administration for multitudes of reasons. As a native East Tennessean, growing up in Elizabethton and Johnson City, ETSU was both close and familiar. During my initial undergraduate campus tours at various universities and colleges, I became enamored with many traits that I felt that ETSU possessed. The campus felt like home. The professors felt like friends. I felt that ETSU wasn't going to be a place where I was challenged to simply sink or swim on my own merits, but that I was going to be encouraged to work very hard and be shepherded by professors who cared. I felt like I would be joining an institution that wanted to see me grow into my best self. Time and experience have shown me that all the things I felt about ETSU were in all actuality true about ETSU. I'm thankful for that. I also chose ETSU because I knew that obtaining degrees within the ETSU College of Business and Technology that were AACSB-accredited meant that I can accurately and truthfully say that my university is

## UNDERSTANDING THE VALUE OF IDENTITY IN HEALTH BEHAVIORS

yron Brooks began his undergraduate career at Clemson University as a biochemistry major. However, something was missing for him, so he turned to another long-loved subject instead, sociology.

Byron had always enjoyed social sciences, and he found an even greater passion for understanding the development and structure of human society through his time at Clemson University. Byron completed a B.A. at Clemson and decided to pursue further education at The Citadel in South Carolina. Based on his piqued interest in substance abuse counseling during an undergraduate course at Clemson, Byron chose the Master's in Clinical Counseling program. During his course of study, Byron attended a lecture provided by Dr. Dennis Russo of East Carolina University who spoke on the idea of health and behavior going hand in hand. Inspired, Byron decided to focus his research on integrative healthcare psychology, which led him to the ETSU Department of Psychology, one of the best in the nation.

In 2016, the Centers for Disease Control and Prevention projected that one in two Black gay and bisexual men will be diagnosed with HIV in their lifetime, if current transmission rates persist. Feeling compelled to act, Byron wanted to use his knowledge and research to address this disparity. Black gay

men are doubly marginalized in today's society and face a heavy clash between their ethnic and sexual identities that create a barrier between themselves and healthcare. Byron wanted to examine the importance of identity in health behaviors, such as the adherence to medication and the use of

by

Kathleen

Tatro

precautions, like condoms. He also wanted to identify what a healthy self-identity looks like and how it affects health behaviors.

Prior to engaging in the dissertation, Byron had to complete his program's preliminary project to earn his doctoral candidacy. He used this opportunity to find a gap in the current body of scholarly literature and pursue a way in which to fill this gap. Byron did this by completing a systematic review, where he looked to fill the gap concerning identity's role in health seeking behaviors. He also wanted to use a more inclusive identifying nomenclature for Black gay men, because identity is not a one-size-fits-all concept. Byron worked with Joann Anderson, a librarian in the Sherrod Library, who was able to offer a great deal of constructive and helpful advice that allowed Byron to get his project off the ground. In total, Byron looked at upwards of 678 abstracts, narrowed that down to 59 applicable articles, 26 of which were included in his systematic review. Byron had several surprising discoveries in his review. First, he found that ethnic identity had a greater impact on health behaviors than sexual identity. Also, he found that

internalized stigmas from various identities (sexual, ethnic, etc.) have major negative impacts on health behaviors. Byron discovered in the course of his research that the nomenclature for Black men who identify as sexual minorities is more behavior-based versus identity-based. Gay and bisexual men are commonly referred to in public health literature as men who have sex with men. Byron hoped to present a more inclusive term for Black gay men, and instead opted to use the term Black Same-Gender Loving Men (BSGLM).

After successfully defending the preliminary project, Byron will use his systematic review as the foundation for his dissertation, which will be an exploratory mixed methods study on healthy identity development among BSGLM. He plans to conduct interviews and surveys, funded in part by an ETSU School of Graduate Studies research grant, to determine which factors affect identity development among BSGLM. The interviews will be used to inform hypotheses about identity development and create a survey battery, which will be used to test these hypotheses and associations between identity

and health behaviors. Byron is tailoring his dissertation promotional materials by depicting BSGLM, as previous evidence shows this increases recruitment and retention for research studies. Byron successfully proposed his dissertation and is beginning to collect data. Byron hopes that his study will serve as a foundation for further research, and the development and utilization of inclusive culturally-sensitive interventions for high risks groups, such as BSGLM. A key element to the

success of any research project is the collaboration of team members, and in the case of graduate research, the relationship between student and faculty advisor. Byron began working with Dr. Stacey Williams in the spring of 2018, because of her previous research on LGBTQ+ populations and campus climate. Byron credits many of his successes to this choice. Dr. Williams, according to Byron, took on a supportive role that not only allowed him to grow professionally, but also allowed this growth with little outside interference. She gave him the space and time to come to his own conclusions, which was



and continues to be very important to Byron. Dr. Williams says that not only is Byron's project a great fit for her lab (the Social Issues and Relations Lab), but also that Byron is the type of student and colleague that every professor hopes to work with, given his drive for success, leadership and interpersonal skills, and deep knowledge in his area of study. She contends that it has been gratifying as a mentor to watch Byron recognize his research passion and to grow as a scholar.

As Byron works to complete his dissertation, he plans to submit his systematic review to the APA journal, Psychology of Sexual Orientation and Gender Diversity. He is also applying for internships, a key aspect of the degree program in clinical psychology. He hopes to find a placement that emphasizes diversity and integrated healthcare. Post-graduation, Byron hopes to work in an academic medical health center where he can train other healthcare providers about culturally sensitive care, while also continuing his clinical work and research with historically underserved, marginalized communities.

# where are they now. Lindsay Toman Master of Arts in Sociology // ETSU // Department of Sociology and Anthropology // 2014

#### Why did you choose ETSU for your education?

I chose ETSU because I wanted a southern experience. I grew up in Michigan and had been living out west after I graduated with my undergraduate degree. I knew that I was not ready to move home yet, and I wanted to travel more. When I found out that I had been accepted, I jumped on the opportunity.

#### *What is your current position and research?*

Currently, I am a Ph.D. student in the sociology department at Wayne State University. I am a Rumble Fellow and King/ Chaves/Parks Fellow, which allows me to concentrate on research and publishing throughout the academic year. I spent the past year as an Albert Schweitzer Fellow, which granted me the opportunity to create my healthcare program called "LGBTQ and You." This training was delivered to medical students, practicing physicians, and healthcare employees throughout the state of Michigan. The training focused on LGBTQ cultural competency and taught physicians how to create a safe space within their practice.

#### What does your current position and research entail?

I am studying the medical process of gender-identity formation of transgender youth. I am interested in learning about how parents, doctors, and patients interact to conclude that a minor is suitable for puberty blockers or hormones that aid in the young person's transition. It will be a qualitative study that includes one-on-one interviews with the individual who identifies as transgender, their parents, and the doctors associated with the process. I am also helping a medical school in the Detroit area write an LGBT health curriculum, which is really exciting!

#### How did your time at ETSU prepare you for your career?

I could not have asked for better professors to help guide my academic career. Martha Copp is one of the best professors and mentors I have had the privilege to study under. She encourages her students to work hard and supports them when they need the extra help. She was highly influential in my career path and continues to be to this day.

#### What advice would you offer current or future graduate students?

Get involved with projects that interest you, but don't burn out. It is important for you to gain experience that will benefit you in the long run, but it is also really important to learn when to say no. Take care of yourself throughout the process and have fun!



Academic Affairs department. This was an opportunity of a lifetime - to get to see the work that goes into making the policies that will eventually affect my students, my school system, and me.

#### What does your current position entail?

Teaching entails more than anyone can ever prepare you for! When I'm not in the classroom, the rest of my day consists of collaborating with my coworkers (other science teachers, assistants, special education teachers, hearing specialists, etc.) to modify and plan differentiated lessons for my students so that they may each grow and succeed both academically and emotionally.

Throughout the coming years, I plan to continue the work from my time at THEC by helping my school system to best support my students for college and career access and success. After learning so much this summer, I am personally excited to learn more about how I can best support my students for success in and beyond my classroom.

## How did your time at ETSU prepare you for your career?

ETSU prepared me through an especially-wonderful Master of Arts in Teaching program. Again, it is nearly impossible to prepare a teacher for all the things he/she will face, but mentors like Janice Cloud, Dr. Alison Barton, and Dr. Aimee Govett supported me in professional learning opportunities, check-ins during my student teaching programs, and so much more. My MAT classes challenged me and made me think outside the box about my teaching practices and educational philosophy. The program really made me feel empowered and that I could and would make a difference in the lives of my students. My time in my MAT program at ETSU gave me the confidence to go into my first day of teaching with excitement. I knew that things would be hard but I, too, like my mentors, will empower my students to do great things and, if I struggled, those same great mentors would help me through.

What advice would you offer current or future graduate students? Take every opportunity to learn all that you can (... but leave time for yourself too). I would tell them that teachers (adjunct professors, professors, program directors, or otherwise) sign up to be in their roles to support you. So, don't ever be afraid to ask for help and don't ever be afraid to sign up for something challenging. After I realized that my mentors would and wanted to support me to learn and challenge myself, as long as I was willing to put in the work, they'd support me all the way. And, don't forget, that leaving time for yourself is okay too!

## Shelby Morris Master of Arts in Teaching // ETSU //

Department of Curriculum and Instruction // 2015

#### Why did you choose ETSU for your education?

ETSU was my father's alma mater. After being recruited by a few schools to play college softball, I knew I had to come from my hometown, in Mt. Juliet, Tennessee, to visit Johnson City before I made a decision. So, I drove the four hours northeast for a recruiting visit. I remember driving over the hill in front of Science Hill; I overlooked the mountains behind the university and told my mother, who was in the car with me, that I had to come to school here. I ended up committing to ETSU as a pitcher the next week. I enjoyed my time so much obtaining my first degree that it was an obvious choice to return to ETSU to get my Master's degree.

#### What is your current position?

I am currently a teacher in Kingsport City Schools at Ross N. Robinson Middle School. I teach 7th grade science and coach the robotics and softball teams. During my summers, I aim to learn more about my educational practice through professional development, camps, and more. I even served a "teacher externship" with THEC (Tennessee Higher Education Commission) this summer (2018) in the

## NECESSITY, THE MOTHER OF NEW UNDERSTANDING

by Kathleen Tatro



Jack Hartsell lives at the intersection of modern technological advancement and modern algebraic theory. Jack attended East Tennessee State University for his undergraduate degree where he earned a B.S. in physics. After completing his Bachelor's degree, Jack decided to pursue entrepreneurial efforts in marketing and data science. He spent three years as an entrepreneur before deciding to return to ETSU for graduate school. As an alumnus, Jack had met and worked with Dr. Rick Norwood, as well as several other members of the faculty and staff in the Department of Mathematics and Statistics at ETSU. He also understood, on a deeper level, the value of the education he would receive by pursuing his graduate studies in Johnson City versus other programs. Based on his prior experience and knowledge, Jack decided to apply himself to the pursuit of a Master's degree in Mathematical Sciences.

The faculty and staff of the Mathematics Department at ETSU were a major factor in Jack's decision to continue his education at ETSU, especially Dr. Rick Norwood. Dr. Norwood, a favorite professor of Jack's, inspired Jack's interests in knot theory,

topology, and abstract algebra. Jack spent a year of directed study with Dr. Norwood on each of the three topics which would serve as the theoretical foundation and underpinnings for his project. For his thesis, Jack wanted to explore the mathematical structure of all possible braids on three strands, specifically in the braid group described by mathematician Emil Artin. His main objective, and the ambition of his project, was to develop a standardized format for the algebraic expression of braids on three strands. There are 140 possible Jones polynomials for braids on three strands, with up to eight crossings. For each braid there can be multiple equivalent algebraic expressions in the Artin braid group; that is, each braid can be constructed by more than one sequence of crossings of strands. Jack wanted to find a rule that would allow mathematicians to narrow down a braid into a single corresponding expression, a direct one-to-one relationship. He hoped to add to the body of scholarly literature by finding a way to simplify algebraic expressions for the Artin braid group.

Jack's passion for technology played a major role in the development of his thesis project. He wanted to

broaden his knowledge not only in theoretical mathematics, but also in technology and computer science. Jack sought to write a computer program to calculate a polynomial expression for each braid, specifically the Jones polynomial. The Jones polynomial is an invariant of a knot which is assigned a variable with a number of coefficients. Invariants are by definition unchangeable when transformations are applied to the knot or braid, and they are very useful for classifying a number of mathematical objects. Jack and Dr. Norwood also used the Temperley-Lieb algebra as a representation of the states of the braid group after the crossings/knots are untied, i.e., after they are cut and re-spliced together. However, since Jack's background is not in computer science, Jack wanted to create a more simplified means of programming for his project. As is often the case, necessity was the mother of invention, or in Jack's case, understanding. Because of his lack of formal training in programming, Jack had to rely on his knowledge of mathematics to solve this problem. Jack, in his attempts to write this simplified program, found several generalizations about braids on three strands that can be used to find a single polynomial expression for each braid.

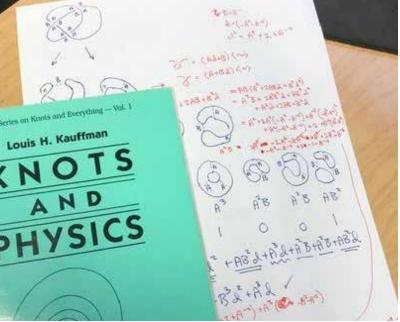
Jack found two key generalizations during his thesis work. First, every possible algebraic expression for a braid could be found to be equivalent to another algebraic expression of a braid of even length. For every three-stranded braid there is an equivalent expression created by a braid of four strands. Second, the same braid can be created whether

you start by crossing strand one and strand two or by crossing strand two and strand three. These two generalizations, as well as other recognized generalizations about braids, cut his list of computer-generated expressions from 13,000 possible expressions to a little under 4,000 possible expressions, for braids with up to eight crossings. Jack's idea would be to use his computer program to reduce the number even further to 140 possible expressions to match with the 140 possible braids on three strands, with up to eight crossings. His findings are a major step in the right direction for future research.

Cooperative research and the bonds formed between a mentor and student are key to the development of many important academic and professional competencies of graduate students. Dr. Norwood, according to Jack, allowed him to rely on his own intuition and allowed him to draw his own conclusions without interference. Jack appreciated that while Dr. Norwood may have seen something that Jack did not, he did not rush to show Jack where the

answer lay. Dr. Norwood says he was able to do so because he was confident in Jack's ability to figure it out for himself. It is Dr. Norwood's belief that Jack, in many ways, is the ideal graduate student who can be counted on to be self-motivated to seek out the answers on his own.

Jack defended his thesis the fall of 2018 and graduated with his M.S. in Mathematical Sciences in December of the same year. His post-graduation plans include spending time as a lecturer before applying for further education. Jack taught trigonometry at ETSU during his graduate studies. He said the experience was both surprising and rewarding, as he did not expect to love teaching as much as he does, not to mention the sense of pride and joy he gets from helping students succeed is incredibly fulfilling for him. He is currently developing his website (jackhartsell. com), which Jack says will help him as he applies for either Ph.D. programs in mathematics, or law school, depending on the opportunities that present themselves.



## NARRATORS OF GRIEF: GIVING by Kathleen NIGERIAN WIDOWS A VOICE

academia and learning. She graduated with a law degree in her home country of Nigeria, and then obtained a Masters in International Law while studying in England. After completing her degree in England, Esosa returned to Nigeria and spent several years working in the private sector. Personal experience brought Esosa together with widowed women who experienced the cultural aspects of widowhood. Widowhood culture refers to practices in place in certain countries, such as Nigeria, in which widows may be required to conform to certain etiquette and behaviors meant to "lessen their burden" and make their lives "easier." Forced isolation, hair cutting, and even the forceful removal of property are just some of the experiences that some Nigerian widows face. Esosa's interactions and conversations with these widows inspired her desire to explore the development, connotation, and trauma associated with, and the resilience developed by Nigerian women who experience widowhood her family, and her interest in women, minority, and diversity studies led her to ETSU's Master of Arts in Liberal Studies degree program.

It was once said, by Queen Elizabeth II, that "Grief is the price we pay for love." Few relate to this quote more than widows and widowers. In any culture, in any religion, this pain is universal. However, in some cultures this pain is potentially compounded by prescribed customs that leave women with less and less autonomy over their own lives. For her thesis, Esosa wanted to focus on women's oppression, from the viewpoint of Nigerian women who had experienced, first-hand, widowhood culture. She wondered how widowhood practices, which in many ways infringe on basic human rights and one's well-being, are supposed to help women grieve and heal.

Previous studies on the subject of widowhood practices and their impact on women were primarily quantitative method studies that attempted to quantify experiences as opposed to understanding them on an individual level. Very few, if any, studies that Esosa read addressed a

sosa Mohammed has always had a passion for woman's agency, or autonomy, as expressed in widowhood culture. Esosa wanted to explore widowhood through several key theoretical frameworks: trauma theory, standpoint theory, and resilience theory. Trauma theory attempts to understand how humans process traumatic experiences and how they are demonstrated, processed, and exposed through various narratives. Standpoint theory explores how authority is grounded in an individual's knowledge and perspectives, and the ways in which it exerts power over an individual's actions. Lastly, resilience theory focuses on an individual's aptitude for adaptation to stress and adversity.

> Prior to her researching and writing her thesis, Esosa wrote several papers for her classes, on various aspects of widowhood in Nigeria that were foundational to her thesis. To help fund her research, Esosa applied for and received a Research Grant Award through the ETSU School of Graduate Studies, which offers competitive grants between \$500 and \$800 each year to help students complete their thesis and dissertation research.

Esosa surveyed twenty women using Survey culture. Esosa's passion for academia, the support of Monkey and then conducted in-depth interviews with twelve of them via Skype. The survey structure used closed questions that targeted social status and how social status affected a woman's widowhood experience. The survey questions also helped Esosa identify and quantify what types of widowhood practices each participant encountered, as not all widows experience the same practices. Lastly, the survey asked each participant how she felt about sharing her experiences. Skype interviews were conducted using open-ended questions about their backgrounds including education, their personal lives, their grief, etc., and to which practices of widowhood they were subjected. Esosa found that all the women she spoke to were very open to sharing their experiences, as many had not been given a chance to express their grief, resulting emotions, and experiences in such a way. She found that for as many narratives of women who "accepted" widowhood practices she heard, there was an equal number of women who struggled against and fought to speak out about the injustices they endured. Many women found their voices through these interviews sharing about widowhood culture. Through expressing themselves during the interviews, many of the women found their voices, agency, and self-empowerment, which

in turn gave them the confidence to empower other widows.

Many women who endure widowhood practices are told that if they did not sever ties with their late husbands through specific rituals and practices it could cause their own death. It is this type of stigma and fear that forces many Nigerian women to cut their hair or follow precisely prescribed rules. Through her study, Esosa found two erroneous preconceived ideas regarding the nature of widowhood practices in Nigeria. First, it is generally thought that women with more formal education were exempt from widowhood culture; however, 67% of participants that endured widowhood practices such as cutting their hair and remaining in isolation for several months, not even venturing to the market, also had post-secondary education. Second, it is thought that widowhood protocols are only observed by indigenous tribes who adhere to traditional religious beliefs and practices. Esosa found in her study that there was buy-in from other major contemporary religions, such as Christianity and Islam. She hypothesizes that religious adherence and adaptation is one factor behind how widowhood culture in Nigeria gained acceptance and even respect. Esosa also found that there were four factors that impacted the extremity of a widow's experience: Social status, in-laws who did not force the matter, if a woman was not formally married, and if the woman chose to follow widowhood practices; social status being the most influential factor. Esosa found that widows were able to cope with not only their grief, but the widowhood practices through seven distinct, repetitive

patterns as evidenced through the interview data. The seven coping strategies Esosa found are religious faith, education, gainful employment, support from family and friends, sociological factors, personal attributes (focused, determined, and persistent), and female agency. Esosa hopes that through her thesis and her work with Nigerian widows she can empower these women and use the power of narration



as a tool to build resilience and autonomy. She also hopes to add to the current theoretical and empirical framework, specifically surrounding resilience for coping with personal and social challenges. Most importantly Esosa wanted to show that widows are not vulnerable or powerless in their grief.

Esosa had the opportunity to work with the exceptional Liberal Studies and Women's Studies faculty during her time at ETSU. She says there are no words to describe the impact these mentors have had on not only her growth as a student, but as a person. She would like to thank specifically her thesis committee chair Dr. Marie Tedesco, and fellow committee members Drs.

Jill LeRoy-Frazier and Phyllis Thompson for their support, pushing her to think deeper and giving her the confidence to know she could accomplish her goals. Dr. Tedesco commends Esosa for demonstrating patience and resilience throughout her research and writing. Dr. Tedesco believes that they truly learned from one another through this process, and to her that is one of the most gratifying aspects of working with

students on theses. Drs. LeRoy-Frazier and Thompson would also like to commend Esosa's ability to find the balance between respecting widows' voices and the process of academic analysis. By bearing witness, Esosa has given Nigerian widows a platform to help regain their autonomy. Esosa has successfully defended her thesis and in March traveled and presented her work at the Southeastern Women's Studies Association Conference in Mississippi. In the future, Esosa hopes to continue her academic pursuits regarding women, minority, and gender studies, and is looking at Ph.D. opportunities across the U.S.



## MAKE A DONATION TODAY!

#### EAST TENNESSEE STATE UNIVERSITY

#### Gift Form - School of Graduate Studies

ETSU.
wship
) Cell ( ) Fax ( )
Cell ( Fax () \$250 \$100 \$50 \$25 Other
below, or pay online at www.etsu.edu/give
nerican Express in the amount of \$
Expiration Date / Security Code



## EAST TENNESSEE STATE UNIVERSITY

Box 70720, Johnson City, TN 37614-1710 http://www.etsu.edu/gradstud Phone (423) 439-4221

