

# A SLICE OF $\pi$

The Official Newsletter of the Department of Mathematics and Statistics



## *Notes from the Chair*



Dr. Crista Arangala

First, I am happy to announce that Laura Taylor, Associate Professor of Statistics, joins me this year as the Associate Chair of the Elon Mathematics and Statistics Department. As you might suspect, 2020 has been an interesting year for everyone in the department. In the spring we enjoyed virtual college coffees, happy hours, and award ceremonies and this fall we hope to be face to face (mask to mask) on campus for as long as possible. We look forward to fun virtual events in the department throughout the year and the potential for more in person events in Spring 2021. We welcome new faculty members Heather Barker, Lecturer in Mathematics and Statistics, Nic Bussberg, Assistant Professor of Statistics, and Brittany Riggs, Lecturer in Mathematics. All of our faculty continue to mentor engaging internship, research, math senior seminar, and statistics practicum experiences.

With your contributions, the department continues to support incoming students in our Scholarship and Mentorship program. This year we have 8 students in the mentorship program. With many events moving into the virtual space, we look to you, our alumni, to think about ways that you can engage with our students that may not have been possible previously. If you are interested in networking or doing a virtual presentation, please let us know.

As always we look forward to updates from all our alumni. As you have professional or family updates, please share with us so that we can celebrate with you.

## *Associate Chair, Dr. Laura Taylor*



Dr. Laura Taylor

I am excited to be taking on a new role this year as the Associate Chair of the Department of Mathematics and Statistics. Crista and I will be working closely to meet the needs of faculty and students in our department, and we will look for ways that we can continue our growth. In addition to this work, I am also chairing a departmental task force related to developing a new Data Analytics major in our department. We are working on creating innovative pathways to attract new majors to our department and are excited about future course offerings. While this is a semester unlike any other, I look forward to the challenges and growth that come with it. Please feel free to reach out to me!

# Welcome New Faculty Members



Professor Heather Barker

Heather Barker joins us this year as a lecturer of Mathematics and Statistics. She is currently working on completing her PhD in STEM Education with a focus in Mathematics and Statistics Education at NC State University. She will begin collecting data this Fall for her dissertation which will focus on online professional development opportunities for statistics educators. During her PhD coursework she also completed a doctoral minor in statistics. Heather holds a Bachelor's degree in Mathematics from Meredith College and a Master's degree in Pure Mathematics from UNC Greensboro. Heather enjoys teaching both mathematics and statistics courses and looks forward to teaching students who are pursuing a teaching licensure.

Her research interests lie in statistics education and professional development for statistics educators. Heather and her husband have two young children and live on their family's farm in Caswell County, NC. Heather and her family love spending time outdoors, growing vegetables, tending to cows and chickens, as well as cooking and traveling.



Dr. Nic Bussberg

Nic Bussberg joins us as Associate Professor of Statistics. Formally from Indiana University, Nic States "My path to statistics was very winding, but I'm very happy that it led me to Elon! I started college with a dual interest in music and biology. Though I still pursued music as a percussion instructor for a local high school, I settled solely on biology because of my desire to work on marine ecosystems. This led to a Master's degree in environmental science. Thanks to the encouragement of several faculty, I explored more quantitative disciplines for my Ph.D., for which I decided on statistics. The beauty I found with statistics is that nearly every discipline has data and a need for someone to analyze and manage said data. I love to focus on this point in my classes and hopefully persuade someone else to explore statistics more! For my research, I'm able to connect my statistics research with work on environmental science research (including marine ecosystems), which in my opinion is the best of both worlds."



Dr. Brittany Riggs

Brittany Riggs joins the department as Lecturer of Mathematics. In March of 2020 she completed her PhD at NC State in the area of algebraic geometry. Brittany states "I have previous teaching experience at NC State, Wake Technical Community College and Northern Virginia Community College. Before I knew I wanted to be a teacher, I also completed a Master's in Ethics, Peace and Global Affairs at American University in Washington, DC. All this put together means I'm super happy to be at a place like Elon!"

We are so fortunate to add Heather, Nic and Brittany to our Department! Please send them a warm welcome!





## ***Dr. Awtrey Elected National PME President***



Dr. Chad Awtrey

Pi Mu Epsilon, the nation's oldest and most prestigious mathematics honorary society, was chartered at Elon University on October 23, 2003. The purpose of the Society is to the promotion and recognition of mathematical scholarship among students in post-secondary institutions. It aims to do this by electing members on an honorary basis according to their proficiency in mathematics and by engaging in activities designed to promote the mathematical and scholarly development of its members. Dr. Awtrey was been elected president. His term starts July 1, and he will first serve as president-elect, then president, and finally as past-resident.

Dr. Awtrey was first elected to the Pi Mu Epsilon National Council in 2014. He has served on the Executive Council, as secretary-treasurer for the organization. Throughout his time on the national council, Awtrey has designed and implemented systems for efficient data collection and reporting that help organize aspects of Pi Mu Epsilon.

This includes the registration and abstract submission process for the annual meeting, travel reimbursement for students and faculty members who attend the annual meeting, evaluating and judging the student presentations at the annual meeting, and developing the database that manages all subscribers to the Pi Mu Epsilon Journal.

In addition to his work in the society, this year Dr. Awtrey enjoyed collaborating on research with Elon undergraduates Hanna Noelle Griesbach and Henry Chance, as well as Dr. Jim Beuerle. Hanna Noelle would have presented at the MAA Southeastern Sectional Meeting in March, were it not for the pandemic. However, she submitted a paper for publication in April, coauthored with Dr. Awtrey and Dr. Beuerle. Dr. Awtrey published three papers this year: one with Ashley Pritchard '20; another with Briana Brady '19; and the third with Kiley Shannon '18, Anna Altmann '23, Sam Cryan, and Madeleine Touchette. Anna, Sam, and Madeleine were students at Williams High School during the research project.

# Dr. Hwayeon Ryu Receives Grant



Dr. Hwayeon Ryu

Assistant Professor Hwayeon Ryu has been awarded 2 grants. The first grant awarded is a Mentoring Travel Grant from the Association for Women in Mathematics with pass-through funds from the National Science Foundation. This grant will support her travel expenses to work with Susanna Röblitz at the University of Bergen in Norway on her proposed project, "A Mathematical Model of Macrophage Differentiation in the Tumor Microenvironment" for the month of June 2021.

The Association for Women in Mathematics is a professional society whose mission is to encourage women and girls to study and to have active careers in the mathematical sciences, and to promote equal opportunity for and the equal treatment of women and girls in the mathematical sciences. As a part of its programs, the objective of Mentoring Travel Grant is to help junior women to develop a long-term working and mentoring relationship with a senior mathematician.

The second grant is awarded from the Mathematics Association of America with pass-through funds from the National Science Foundation for her project, "Professional Development Emphasizing Data-Centered Resources and Pedagogies for Instructors of Undergraduate Introductory Statistics (StatPREP). StatPREP strives to provide professional development for faculty teaching introductory statistics, particularly two-year college instructors, through a series of two-year regional workshops and follow-up activities.

## Welcome baby AJ!!

Congratulations to Dr. Kristen Mazur and her husband David on the birth of their daughter AJ. AJ (short for Anna Jacqueline) was born on 6/29/20. She is joined by her "fur siblings" Emmy, Moritz and Scoober.



Anna Jacqueline "AJ" Allison



AJ, Dr. Mazur and husband David Allison



# 1st Annual Employer-Student Panel for Math and Stats Majors

On February 18, 2020, the department held its first ever Employer-Student Panel for math and stats majors, with a total of 25 students, faculty, and staff attending. **Dr. Todd Lee** served as emcee. We worked closely with representatives from the Student Professional Development Center (SPDC) to recruit three current students from our various majors and three companies from business/industry that hire our majors. The student panelists were **Hanna Noelle Griesbach**, **Taylor McFadden**, and **Hannah Parker**. In addition to answering questions from attendees, student panelists discussed their experiences participating in various Elon Capstone experiences, while employer panelists and members of SPDC provided advice on the benefits of participating in such experiences, highlighted the types of non-course soft-skills that students should aim to develop, and discussed how to apply and be successful in their placement. We hope to organize this event each year, and we are very interested in having alumni serve as panelists. Please reach out Tracy if you are interested!

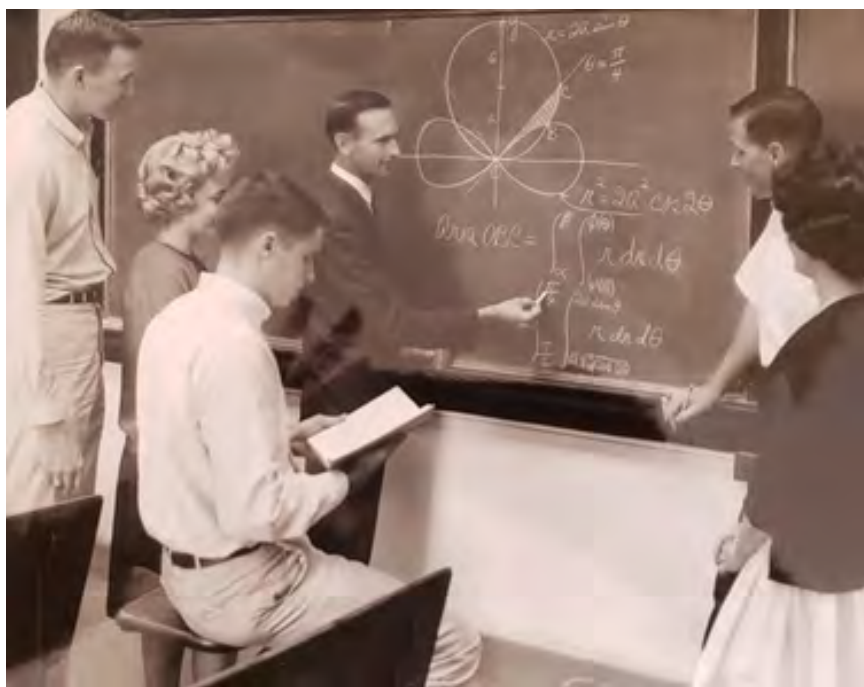


Our Panelist, Hannah Parker, Hanna Noelle Griesbach and Taylor McFadden

## A History Lesson from an Alumni.....

In Spring 2020, the Elon Mathematics and Statistics Department contacted alumni for nominations for the Alumni Faculty Engagement Award. We thank all of you for your many nominations, and although we decided to keep your nominations and award the Spring 2021, we wanted to highlight Lynne Davis' '71 nomination of Wes Alexander. Lynne states that Professor Alexander was a great teacher, mentor, human being that inspired her to be a mathematician. Wes Alexander received his B.S. in Mathematics from Appalachian State in 1953, his M.A. in Mathematics Education from Appalachian State in 1955, and his M.S. in Mathematics from New Mexico State University in 1968. He started teaching at Elon College in 1961 and remained an Associate Professor of Mathematics in the Elon College Department of Mathematics until his retirement in 1994. He chaired the department for 12 years. As a mathematician, Wes had a high work ethic, putting a lot of time at Elon. Wes also notes in his annual reviews that he attended workshops in the late 1980s and early 1990s on microcomputers and using DERIVE in Calculus.

Wes was also an ordained deacon and a member of the Elon College Community Church. He served for many years as the Elon Faculty Athletics Represented and NAIA District 26 Eligibility Chairman. In his role, he reviewed the athletic eligibility for each Elon athlete and was devoted to Elon athletics. He was inducted into both the Elon College Sports Hall of Fame and the NAIA Hall of Fame.



Professor Alexander teaching students



Professor Wes Alexander

# *Spotlight on Students*

Congratulations to our 32 graduating seniors! Many have lined up exciting careers or will attend graduate school.

Those attending graduate schools include: **Jack Amend** (Temple University), **Megan Bargstedt** (Elon University), **Rob Elmore** (NC State), **Yousaf Khan** (NC State), **Hannah Parker** (UNC-G), **Kelli Schmidt** (George Mason University). **Orion Wynblatt** (University of Minnesota).

Those entering the workplace include: **Katie Barthelmess** (PNC Bank, Pittsburgh, PA), **Sarah Boggins** (US Air Force), **Breyland Cyphers** (FactSet, Norwalk, CT), **Alison Filbey** (American Institutes for Research, Arlington, VA), **Kylee Gomilla** (Green Level High School, Cary NC), **Angela Jeffers** (Social & Scientific Systems, Durham, NC), **Nicole Kister** (Beacon Hill Staffing Firm, Washington DC), **Chris Laskay** (RestorixHealth, White Plains, NY), **Ian Mayne** (MetLife, Cary NC), **Taylor McFadden** (American Association of Colleges, Washington DC), **Sarah Murphy** (SharkNinja, Needham MA), **Ashley Pritchard** (Southern Alamance High School, Graham, NC), **Tyler Schanzer** (Grimsley High School, Greensboro, NC), **Kelly Schmidt** (Mountain View High School, VA), **Julia Tranguch** (SAS, Raleigh, NC) and **Brittany Tuwamo** (Abt Associates, Atlanta, GA).

Congratulations to **Jack Amend '20**, **Alison Filbey '20**, **Sara Murphy '20** and **Ashley Pritchard '20** on their recent induction to Phi Beta Kappa.

Congratulations to **Max Ades '21**, **Sarah Austin '21**, **Kasey Collins '21**, **Kylee Gomilla '20**, **Lainey Kasian '21**, **Yousaf Khan '20**, **Cara Linder '21**, **Amy Moore '21**, **Tim Redgrave '21**, **Amy Rodriguez '21**, **Jonathan Shaw '21** and **Lexi Ukins '21**. on their recent induction to Phi Kappa Phi.

*Congratulations to **Sarah Austin '21** and **Amy Moore '21** for becoming Lumen Scholars!*

COVID 19 kept us from having our annual dinner, however we still celebrated our graduates virtually and the following awards were given: **Taylor McFadden '20** and **Orion Wynblatt '20** Outstanding Experiential Learning Award in Statistics. **Kylee Gomilla '20**, **Hannah Parker '20** and **Ashley Pritchard '20**-Outstanding Achievement Award in Mathematics. **Sierra Paloian '20** and **Taylor McFadden '20**-Outstanding Achievement Award in Statistics. and **Kylee Gomilla '20** Outstanding Research Award in Mathematics.

New inductees into Pi Mu Epsilon, the National Mathematics Honor Society include: **Max Ades**, **Brittany Barton**, **Kasey Collins**, **Sarah Gillars**, **Hanna Noelle Griesbach**, **Yousaf Khan**, **Cole Kocjancic**, **Florie Markwell**, **Carter Martin**, **Lilly Penaloza**, **Tim Redgrave**, **Maia Tice**, **Lexi Uknis** and **Annalise von Sprecken**.

New inductees into Mu Sigma Rho, The Statistics Honor Society include: **Jack Amend**, **Sara Armstrong**, **Sam Bacon**, **Isabel Bufton**, **Justin Davisson**, **Alison Filbey**, **Madeline Gall**, **Alexander Lorne**, and **Amy Rodriguez**.





## *Alumni Updates*

*We have a lot of updates to share! We cherish these updates so please keep them coming!*

**Karen Lawrence '04**, "I worked as a Department of Defense software engineer for over 8 years after getting a MS in Math at Texas Tech University. In 2015 I went back to school to take science pre-reqs to apply to veterinary school. I am currently a 3rd year veterinary student at Cornell University. I have the Army Health Professional Scholarship Program so I will get entering into the Army as a Captain when I graduate from vet school in 2021. Life is so crazy!"

**Joseph Dulaney '19**, "I am doing a fellowship program called The Piedmont Fellows Program through Friendly Hills Church in Jamestown, NC. As a part of the program, I am work for The Welfare Reform Liaison Project (WRLP) and Tri-Synergy Corporate Care."

**Madeline Edwards '15**, "Currently a PhD candidate at the University of New Hampshire in the Integrated Applied Mathematics Program."

**Robin French '15**, "I am still teaching full time in NYC. This is my second year teaching middle school math after teaching high school math for 3 years. I have begun graduate school part time at Teachers College at Columbia University."

**Cindy Goodson Blanchard '10**, "I am starting my 10th year teaching mathematics at Central High School in Knoxville, TN. I primarily teach Precalculus to juniors and seniors as my avenue to share "math love". I stay busy outside of the classroom with my two-year old daughter, Bethany."

**Laura Brooks '06**, Named the 2019 North Carolina Burroughs Wellcome Fund Northwest Region Teacher of the Year. This is her 14th year teaching at Wilkes Central High School in Wilkesboro, NC. She teaches everything from Math 1 to AP Calculus.

**Benjamin Malone '18**, "I wrapped up teaching mathematics in Thailand and now I am in Dublin pursuing a Masters of Education at Trinity College Dublin"

**John Paul Mullican, '09** Completed my MFA in Theatrical Technical Direction in 2015 at the University of North Carolina School of the Arts. Have had the opportunity to be a freelance Technical & Structural Designer for several large international touring shows (Ex: Beauty & the Beast and Phantom of the Opera) as well as a few Broadway or Off-Broadway shows (Ex: Cirque du Soleil's Paramour and Charlie & the Chocolate Factory). Am currently the Technical Director for the Department of Performing Arts at Elon University. I started in this position in the Fall of 2017.

**Jaime Speiser '10**, "I received my PhD in Biostatistics from the medical university of South Carolina in 2017 and now work as an assistant professor at Wake Forest School of Medicine in Winston Salem. I got married last September 2018 and we welcomed a baby girl , Lenore in September 2019."

**Kelly Reagan '17**, "I am in the third year of my PhD program in Systems Modeling and Analysis at Virginia Commonwealth University in Richmond, VA. I interned with Integrative Emergency Services this summer in Dallas, TX working as an emergency department clinical data analyst, I published a paper at VCU: <https://www.sciencedirect.com/science/article/abs/pii/S0196655319306832>, and Dr. Yokley, Dr. Arangala and I published our dengue fever research."



*updates continued.....*

**Adrienne Rouiller '13**, Residency Program Director of a new PGY1 Pharmacy Residency program at UMass Memorial HealthAlliance-Clinton Hospital in MA; recruiting for first residency class starting July 2020.

**Alexis Padula, '18**, "I Work as a Software Engineer at Fidelity Investments in Durham,NC. I teach computer science through nonprofits on the weekends and tutor in high school math during the week"

**John R. "Jack" Huber, '70**, "Retired in 2004 from the U.S. Department of Agriculture (Farm Service Agency). I've been taking it easy since then although I'm still an avid bicyclist at the advanced age of 71."

**Steve Mauldin, '60**, "AB degree from Elon in Mathematics and English, 1960, BS degree from Pennsylvania State University in Meteorology, 1963,Advanced work in Environmental Management through Golden Gate University,Career pilot and meteorologist with Untied States Air Force 1961-1984,Currently a Missionary through Cadence International, a ministry to our military worldwide (Who would have thought?)"

**Kate Mansi Merrill '00**, Completed Doctor of Education in 2013 at UCLA. Currently working as the Director of Curriculum and Instruction at Center City Public Charter Schools in Washington, D.C.

**Emily Buehler, '13**, "I have just finished my PhD in Criminology at the University of Manchester. Next, I will begin a research fellowship at the University of Oxford in the Department of Education. Specifically, I will be working in the Rees Centre, a research group that focuses on improving education and life outcomes for children with experiences in social care."

**Nicole Miles '15**, Currently working at John Hancock Investments

**Alex Spitz '13**, "I am currently an analyst on the Asset Allocation team at Columbia Threadneedle Investments, focusing on US macroeconomics."

**Nicole D'Amora, '17** "Risk Analyst at Credit Suisse from June 2017 to August 2019 ( Raleigh, NC), Assistant Vice President, Risk Analysis Specialist - Bank of America as of August 2019 ( Charlotte, NC) "

**Hal Gartner '14**, Starting year 4 teaching mathematics at Cardigan Mountain School (Canaan, NH).

## ***What is your favorite memory from Elon?***

"Specifically, I miss sitting out in front of Belk, chatting with friends about our classes and weekend plans, and soaking up the sunshine while eating pesto pasta from Pangeos." ~ **Emily Buehler '13**

"Dr. Lee always believed that I was smarter than I felt. I remember his Probability Theory course. I have never seen anyone as entertained by math as Dr. Lee. Now that I spend much of my time guiding teachers through Common Core, I fully understand the math love. A teacher told me the other day that I was "way too excited about math," and I thought to myself, "Dr. Lee would be proud." ~ **Kate Mansi Merrill '00**

"Working in the dining hall, and snack bar; photography class with Dr. Hook; sports events" ~ **Hal Williams '66**

"Elonthon Exec 2016" ~ **Holly Holsopple Biswurm '17**

"It is hard to pick a specific memory but more of the general feeling of being welcome and encouraged by every professor to excel." ~ **Madeline Edwards-'15**

*memories continued....*

"Dr Alonzo Hook and all the friends I made from many different places." ~ **Johnna Davis Jackson (Jackie) '64**

"I loved living in the Elon College Fellows living Learning Community and our trip to Washington DC my freshman year." ~ **Jaime Speiser '10**

"Being in Kappa Delta and participating in SURE with Dr. Yokley" ~ **Kelly Reagan '17**

"I was just relaying to my high school students the benefits of attending a small university, including College Coffee and Math Tea! I love that the small community allowed me to interact with my professors and learn from them outside of a lecture class." ~ **Cindy Goodson Blanchard '10**

"Hard to say, it might have been when I found out I had been accepted as a student and would be have a draft deferment as long as I maintained a C average. Shaking Dr. Danieley's hand as he handed me my diploma four years later is also something I won't forget." ~ **Jack Huber '70**

"My favorite memories all center around the three years I was the "Elon Christian" mascot, mainly on the football field, from 1957 to 1960. This gave me 'license' to cavort throughout the stands, in the end zone, on the side lines, and to torment the referees (to some degree). This, combined with several years on the basketball team under "Doc" Mathis, and four years of varsity tennis fills my vast memories of dear 'ole Elon. The Math degree paved the way for many of my Air Force positions, not only in flying or weather forecasting, but in systems development and analysis. And the English degree allowed me to be a public speaker for the Air Force, and also a 'ghost writer' for a 4-Star General. This took me to places I would never have had the opportunity. Thanks, ELON!" **Steve Mauldin '60**

"Engineering and building my first complete show as Technical Director at Elon: Boeing Boeing for the Honors Thesis of Carin Metzger." ~ **John Paul Mullican, '09**

"Thursday afternoon Math Tea....one of the major reasons I got distracted in college and ended up with a math degree (as well as Dr. Lee's charismatic nature and Amy Oliver's peer pressure). Also sitting in Dr. Lee's Calc 2 class first semester freshman year when a student asked what 5! was to which he responded by yelling at the top of his lungs "five" :)" ~ **Karen Lawrence '04**

"My favorite Elon tradition is the luminaries. In college, it is easy to be constantly in a future-forward mindset. Luminaries provided a wonderful time to be in the present with the wonderful community around me. I could always feel the peace, light, and warmth surrounding me, even if it was 30 degrees out. I am excited to be living in N.C. so I can return to campus for this special event." ~ **Kylee Gomilla '19**

"I think the acorn/sapling tradition is very symbolic of one's journey at Elon. Since freshman year, I have grown so much and I have learned a lot about myself. I still have my acorn as a reminder of where I started at Elon and where I want to go in life." ~ **Taylor McFadden '19**

"The luminaries and tree-lighting ceremony, just the camaraderie of everyone being together. It's a fun space to be in. And the yearly training working at Moseley Center. It was a highlight. We've become like a family. We're really close and work well together. Serving the campus, being the professional face of the university, is really cool." ~ **Jack Amend '19**

"Hanging out with friends in the dorm." ~ **Joseph Dulaney '19**

"US Nationals with the rugby team." ~ **Hal Gartner 2014**



## A year in review.....with fun pictures



Mark Weaver, Hwayeon Ryu and Todd Lee at the MAA Meeting in Colorado Jan 2020.



Our Welcome Dinner has become a very popular event and is well attended with those students who either newly declared majors or those who may be leaning towards a Mathematics or Statistics Major. Our guest speaker this year was alum Amy Good Robbins'14 who is an analyst at Hulu.



Amy Good Robbins '14



The Panelist for the Welcome Dinner were Hannah Parker, Ashley Pritchard and Orion Wynblatt all of the class of 2020.



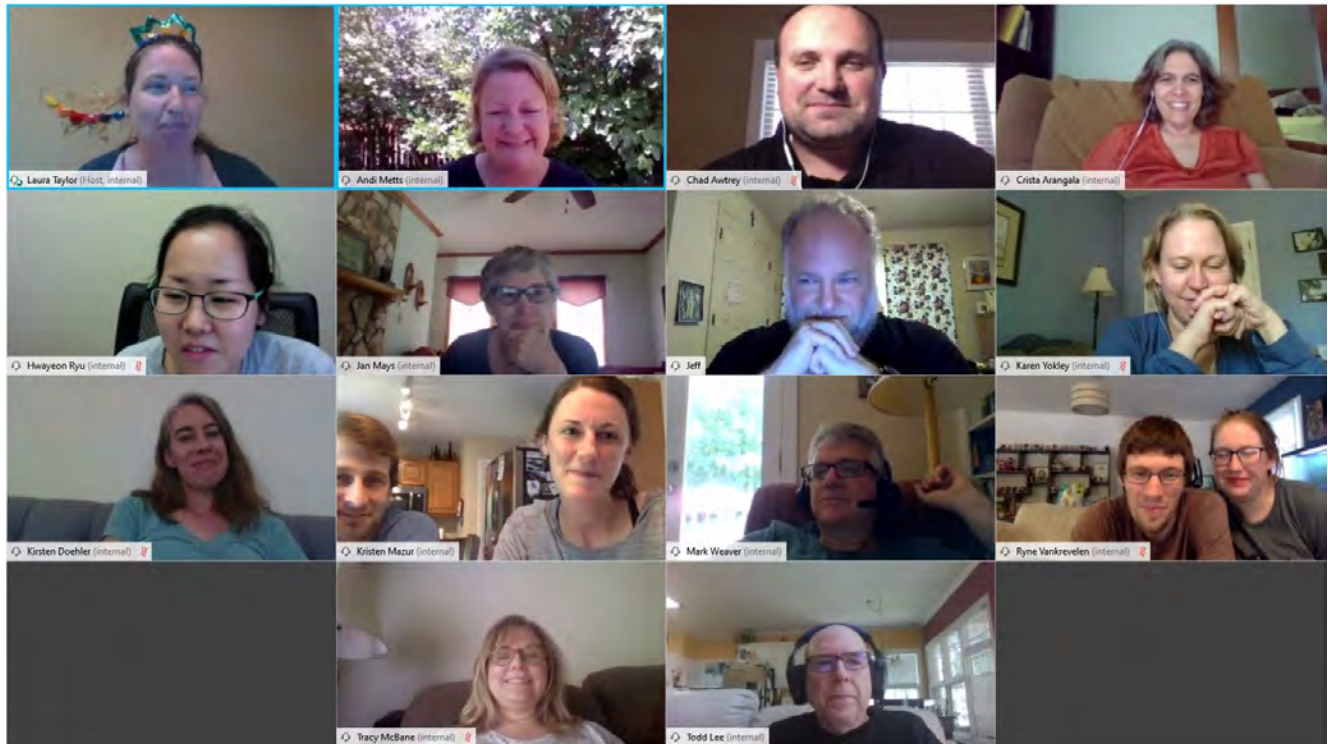
Dr. Taylor and her friend Akim Adekpedjou who gave one of the PME talks



Dr. Taylor with her junior statisticians Sarah and Katie the Women in Statistics and Data Science Conference



In March, we were all sent home due to Covid-19, But that did NOT stop us!



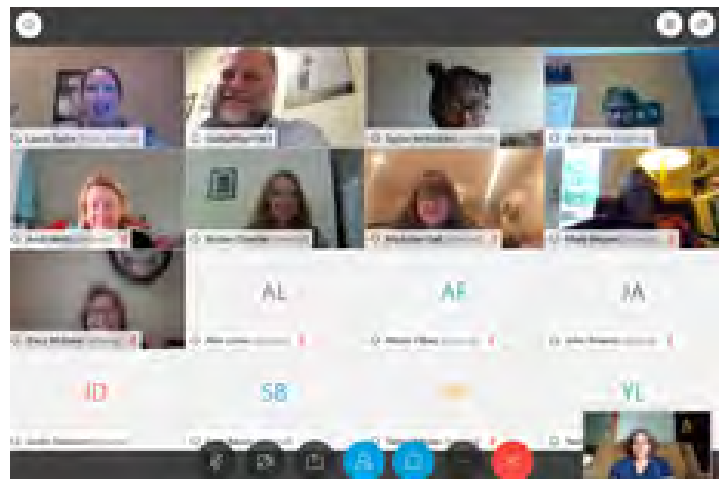
A fun virtual Hamilton Themed baby shower for Dr. Mazur and her husband David.



Virtual college coffee 3/31/20



Virtual Department meeting 4/1/20

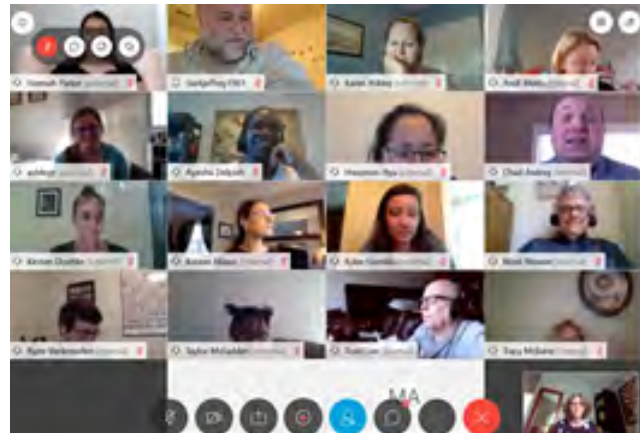


Mu Sigma Rho Induction held 5/5/20





PME  
Induction  
held 4/28/20



Senior Awards Ceremony held on 5/7/20



Crazy Hat Day

We held a virtual spirit week for the Math and Stats Students. We had our Department Mascot, Oliver demonstrate the different days



Spirit Day



Math Love Day



Maroon and Gold day



Pajama Day





## Faculty Updates

Associate Professor of Mathematics **Chad Awtrey** and **Peter Jakes '17** have published a research paper in the most recent issue of the Canadian Mathematical Bulletin. The paper is titled "Galois groups of even sextic polynomials"

Associate Professor of Mathematics **Karen Yokley** led a short course along side Dr. Nick Luke, Associate Professor of Mathematics from NC A&T University on "Modeling Throughout the Curriculum: Disease Transmission" Project NExT Program at the Mathematical Association of America (MAA) MathFest Conference in Cincinnati, OH in August 2019.

This summer saw the first offering of the National Science Foundation-funded Joint Summer Research Experiences for Undergraduates (REU) program offered through a collaboration between Elon University and North Carolina A&T State University and led by program co-directors Elon Professor of Mathematics **Karen Yokley** and Associate Professor of Mathematics Nicholas Luke from N.C. A&T.

Assistant Professor **Hwayeon Ryu** has been elected an associate editor of the Mathematical Association of America (MAA) journal FOCUS.

Assistant Professor of Mathematics and Statistics **Kristen Mazur** recently gave a mathematics colloquium talk at Christopher Newport University in Newport News, Virginia. Her talk titled "An Overview of the Mathematics of Approval Voting" detailed recent mathematics research in approval voting.

Associate Professor of Mathematics **Karen Yokley**, Professor of Mathematics **Crista Arangala**, Hannah Parker '20 and Sabrina Campelo '18 recently published a paper investigating how time spent in neighboring communities in Sri Lanka affects the spread of dengue fever.

Assistant Professor of Statistics **Mark Weaver** collaborated with Dr. Beth Raymond from Gynuity Health Projects in New York City and other researchers to conduct a study to explore the possibility of using pregnancy-associated proteins to predict the gestational age of a pregnancy. Sensitivity and Specificity of Placental Proteins for Gestational Age Screening: An Exploratory Study" was published in the May 2020 issue of the journal Contraception.

Assistant Professor **Aaron Trocki**, Associate Professor **Karen Yokley** and Associate Professor **Jim Beuerle** of the Department of Mathematics have published the results of pedagogical interventions in the Mathematical Association of America journal FOCUS. With the support of a Diversity and Inclusion Grant from the Center for the Advancement of Teaching and Learning, the team designed strategies to increase student engagement, communication and ownership of learning with an emphasis on student collaborative problem-solving in the classroom.

Assistant Professor of Mathematics **Andrew Dellinger** has published a new article on liver injury caused by a common antibiotic in the journal Hepatology.

Associate Professor of Mathematics **Chad Awtrey**, Kiley Shannon '18, Anna Altmann '23, Sam Cryan, and Madeleine Touchette have published a research paper, "Galois groups of doubly even octic polynomials" in the most recent issue of the Journal of Algebra and Its Applications.

**Kristen Mazur**, Assistant Professor of Mathematics and Statistics published an article in Math Horizons on productive failure throughout the history of mathematics.



The following faculty members from the Department of Mathematics and Statistics attended the Joint Mathematics Meetings held Jan. 15-18 in Denver, Colorado: Professors **Jeff Clark** and **Todd Lee**, Associate Professor **Chad Awtrey**, Assistant Professors **Kristen Mazur**, **Hwyaeon Ryu** and **Mark Weaver**.

Professor of Mathematics **Jeff Clark** chaired a meeting of the MAA's Committee on Minicourses and monitored 3 of the 10 minicourses offered for quality control. Clark also attended a meeting of the MAA's Section Officers as past chair of the Southeastern Section as well as a meeting of the MAA's Council on Meetings as chair of the Committee on Minicourses.

Associate Professors **Laura Taylor** and **Aaron Trocki** along with Lecturer **Ryne VanKrevelen**, attended the AAC&U Transforming STEM Higher Education as part of their work on an HHMI grant.

Associate Professors **Kirstie Doehler** and **Laura Taylor** along with Assistant Professor **Mark Weaver** attended eCOTS (electronic Conference on Teaching Statistics.) Doehler and Taylor along with Elon students presented.

Assistant Professor of Mathematics and Statistics **Kristen Mazur** recently gave a mathematics colloquium talk at High Point University. Her talk titled "Four Stories of Successful Failure in Mathematics" highlights stories from the history of mathematics in which failure led to new mathematical ideas.

Faculty Ombudsperson **Jeff Clark** attended a training workshop offered by the International Ombudsman Association in Minneapolis on July 22-24.

**Laura Taylor**, Associate Professor of Statistics, attended and presented at the Women in Statistics and Data Science in October.

Associate Professor **Aaron Trocki** presented a paper "Developing Theory, Research, and Tools for Effective Launching: Developing a Launch Framework" at The Forty-First Annual Meeting of the North American Chapter of the International Group for Psychology of Mathematics Education.

**Thank you so much for your donations to our department, which help us provide money for equipment and projects. We are so grateful for the following donors for the academic year 2018-2019:**

**Abigail Garcia '11, Dee Sizemore '86, Jamie Speiser '10 Amanda Davis '98, Amy Flower '04, Amy Robbins '14, Paul and Renee Armstrong, Angeline Sanders '18, Samantha Chesson '21 Jillian Kronemer '16, Schwab Charitable Fund, Crista Arangala, Daniel Rapp '13, Eleanor S. Schlechter, '17, Hannah Parker '20, Shaiz Bey Superville '23, Chet Deshmukh, Erin Krupa '02, Erin M. Kost '18, Fidelity Investments Matching Gift Program, Gina O'Rourke '11, Helen Walton, Insuk Shim, Isabel Gesen '19, James Beuerle, Cynthia Blanchard '10, Janice Ferguson, Jeanette Morky '03, Jennifer Riemer '11, Jessica Kelly '09, Juliet Goodman '18, Kevin and Christine Chesson, Robert Elmore, Hal and Mary Williams '66, Marty and Laura Callinan '08, Mary C. Hall '10, Mary Macdonald '15, Mary Neill '92, Melissa Gaisser '10, Sharon Medeiros '02, Brianna Long '05, Stephen and Monica McMahon, '19, Nathan Pool '17, Nicholas Harrison '02, Nihar Deshmukh '22, Olivia F. Lennox-Sanzone '18, Ryne VanKrevelen, Todd Lee, Tracy McBane.**