

# A SLICE OF $\pi$

The Official Newsletter of the Department of Mathematics and Statistics



## **Dr. Crista Arangala Awarded the Excellence in Service and Leadership Award**

Dr. Crista Arangala was awarded the Excellence in Service and Leadership Award by Dean Gabie Smith for her excellent work in Elon College, the College of Arts and Sciences. Dr. Arangala, professor and chair of the Department of Mathematics and Statistics, and outgoing chair of the University Curriculum Committee, has a strong record of service and leadership on Elon's campus and off campus on behalf of her discipline. She has served as a reader for Mathematics Fulbright applications and has served on the editorial board for Mathematical Association of America Notices. She has also served as chair of University Curriculum Committee for the past three years, where she worked with the Elon Core Curriculum Committee to finalize guidelines for experiential learning credit and helped Elon transition to smart catalog. She helped steward the use of the Elon Traveling Science Center with Kerala schools and Cochin University of Science in Technology, served on the Strategic Planning Committee, and has served as past chair of Graduate Council (2015-17, chair 2016-17)

Congratulations Dr. Arangala! We are very proud of you!

### *Announcements from the Chair* *Dr. Crista Arangala*

As you can see from our packed newsletter, the past year has been an eventful one. We look forward to another fun and successful year in 2019-2020 in the Elon Mathematics and Statistics Department. We welcome new faculty member Dr. Hwayeon Ryu who joins our applied mathematics team. 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 5 students in the mentorship program. We look forward to a local Mathematical Association of America Southeastern Sectional Meeting in March 2020 at High Point University, where we hope many of our students will attend and present. We have an action packed year of guest speakers from Biometrics, Hulu, the Naval Research Lab, Missouri State University, and High Point University. 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.

# Dr. Kirstie Doehler Awarded the 2019 Alumni Impact Award



In 2018-2019, alumni sent in nominations for the Alumni Impact Award, an award to be given to a faculty member in the department who served as an excellent mentor to students and alumni alike. This year, the inaugural year of this award, Dr. Kirstie Doehler received this award at the Senior Celebration in May. One statistics alumni wrote that Dr. Doehler articulated clear expectations of coursework, incorporates real-life applications of statistics, and was very approachable to students. In survey sampling class, Dr. Doehler had students conduct a semester-long service-learning project with a community organization in Burlington. This experience provided a hands-on exposure while also presenting real-life challenges when applying course work to real-life situations.

Another Statistics alumni wrote that about 10 months after graduation and a long struggle to find a career path, she received an email from Dr. Doehler asking what she was up to. This alumni wrote that Dr. Doehler had given my name to a recruiter and had encouraged her to apply. Dr. Doehler was an advocate for this student well past graduation and reached out a hand when the alumni was starting to give up on herself. It is our hope that we will continue to give this award on a yearly basis so if you would like to nominate a math or statistics faculty member for the award please send Dr. Arangala (ccoles) an email with some of your memorable stories or interactions with the faculty member.

## Welcome Dr. Hwayeon Ryu



We are excited to announce that Dr. Hwayeon Ryu has joined our faculty. Dr. Ryu joined Elon University in August 2019 after working at the University of Hartford for 3 years. She received both her M.A. and PhD. in Mathematics from Duke University. Her research interests are focused on mathematical modeling and analysis of dynamical systems arising from other disciplines like biology, neuroscience, epidemiology and sociology. She also has a great passion for the development of a bridge curriculum and program between mathematics and biology.

Away from studying math, Dr. Ryu enjoys playing tennis with her husband, Tim though they haven't played much recently because their 3.5-year old daughter, Meeso always keep them busy. She is thrilled to be back to NC and be part of Elon Community!

Welcome Dr. Ryu! We are so excited that you are here!

# Four Faculty Members Receive Grants



## ***NSF grant awarded to Dr. Karen Yokley***

Associate Professor of Mathematics Karen Yokley was recently awarded a National Science Foundation grant to support summer research experiences for undergraduates. Yokley, along with Nicholas Luke, Associate Professor of Mathematics at NC A&T State University, made the grant funding submission "Collaborative Proposal: REU Site: NC A&T State University and Elon University Joint Summer REU in Mathematical Biology." The \$359,972 award for Yokley and Luke, who will each be a principal investigator for their institution will fund research experiences for undergraduates (REUs) from 2020 through 2022.

Assistant Professor of Mathematics and Statistics Kristen Mazur will also be mentoring in this REU program. The joint REU will be a 10-week residential summer program in which undergraduates participants will conduct research on a variety of topics within the field of mathematical biology mentored by faculty from the two host institutions. Research topics are drawn from a variety of fields, including pharmacokinetics, pharmacodynamics, epidemiological and ecological modeling, and biostatistics. The location of the program will alternate between the host institutions, with the 2020 program being held at N.C. A&T State University. The primary objective of the program is to provide students an opportunity to conduct and present research with a diverse group of peers. Students will also gain skills related to writing mathematical proofs and using mathematical software.

## ***Dr. Mark Weaver collaborating on newly funded grant from National Institute on Aging***



Assistant Professor of Statistics Mark Weaver is a co-investigator on a research team that has recently been awarded a five-year R01 grant from the National Institute on Aging at the National Institutes of Health. Weaver is collaborating with colleagues from The University of North Carolina at Chapel Hill. The principal investigator is Dr. Timothy Platts-Mills, Assistant Professor and Vice Chair of Research at the UNC Department of Emergency Medicine. The title of the research is "Reducing the Transition from Acute to Chronic Musculoskeletal Pain Among Older Adults." The goal of this grant is to conduct a three-arm randomized trial of an emergency department based intervention to improve early outpatient pain management in older adults. The intervention to be tested combines an educational video with telecare phone follow-up by a nurse 48-72 hours after the Emergency Department visit.



## ***Dr. Jim Beuerle and Dr. Ryne VanKrevelen awarded the MMA Dolciani Mathematics Enrichment Grant***



James Beuerle, Associate Professor of Mathematics, and Ryne VanKrevelen, Lecturer in Statistics, received a \$3,570 Mathematical Association of America Dolciani Enrichment Grant. This project is a collaboration between The Williams High School Mathematics Club and Elon University. In its third year, this program seeks to engage a diverse population of approximately 45 Williams High School students in three types of mathematical enrichment activities during the 2019-2020 academic year for the purpose of inspiring those students



to take more mathematics classes in their secondary and post secondary careers. The three activities are: (1) preparing for and participating in two mathematics contests - the AMC 10/12 and the Elon University High School Math Contest; (2) researching, alongside Elon University undergraduate mathematics majors, unsolved problems in the area of statistics and disseminating results in the form of conference presentations and at least one submission for publication; (3) attending a monthly speaker series, hosted at Elon, where speakers from academia, business, industry, and government discuss aspects of their careers that have the potential to inspire students to pursue a STEM major at the university level at Elon University in conjunction with eCOTS.

## ***Ben Rogers '19 receives award from N.C. Mathematics Conference***

Ben Rogers '19 received the Outstanding Mathematics Education Student award by the North Carolina Council for Teachers of Mathematics on Nov. 1, 2018 at its annual conference in Greensboro. This is the third year in a row that an Elon student has won the award. While at Elon, Rogers was a dedicated student in mathematics and an enthusiastic advocate for the teaching profession. As part of Elon's Teaching Fellows program, he mentored high school students in Elon Academy, served as president of the Elon School of Education Ambassadors and the Elon Future Educators club. In addition to his work with education, Rogers pursued his interest in statistics by completing an undergraduate research project with Lecturer Ryne VanKrevelen using baseball sabermetrics to predict winning percentages and presented his research at SURF. He also mentored high school students in statistics research with Associate Professor Chad Awtrey as part of a Mathematics Association of America grant awarded to the Elon's Mathematics and Statistics Department. Rogers is currently in his first year teaching high school math at Green Level High School in Cary, NC.



*Ben Rogers '19 with Professor Jan Mays*



# *Alumni Updates*

We love to hear from our alumni! Please keep us updated on family, education and employment! Send updates or anything you would like to see in the newsletter to Tracy McBane at [tmcbane@elon.edu](mailto:tmcbane@elon.edu) or to Crista Arangala at [ccoles@elon.edu](mailto:ccoles@elon.edu).

**Amanda Davis '98:** "I had the opportunity to present at the spring NCMATYC conference on my collaboration with Appalachian State to provide a repository of quality activities for community college instructors."

**Amy Heaton '16-**is recently married and has been accepted into the STEM Education Masters Program in Austin, Texas.

**Kristen Koenig:** "After 8 years of teaching high school math, I am now the Testing Coordinator at William Byrd High School in Roanoke, VA."

**Eastman Bryant Ford '74-**awarded Doctor of Education from Wingate University in 2017 at the age of 66! Congratulations!

**Courtney Whalen '12-**"I am working as a Data Scientist at a start up company called Astraea doing machine learning on satellite imagery. We focus our modeling efforts on issues related to the environment such as climate change and renewable energy. Working on MS in Analytics at Georgia Tech (remotely). Recently got engaged to a fellow 2012 Elon grad - Dan Layman."

**Dee Calton Sizemore '86-**"I have been teaching Math at William High School in Burlington since 1986. My husband of 33 years, Alva, is the Elon Fire Chief. We have 3 grown children, Joseph and Ashley Sizemore of Burlington, Laura and Carlos Guzman of Irving, Texas, and Chris Sizemore of Burlington."

**Abigail Baumann Garcia '11-**"I am finishing my fourth year working at Georgetown University and was recently promoted to Assistant Director for Finance and Administration in the Division of Student Affairs. I began Georgetown's evening MBA Program in the McDonough School of Business in August, and my daughter, Luna, is turning 3 in October!"

**Josh Rowan '04-**"I am still a math teacher at Collins Hill High School in Suwanee Ga which is the same school that hired me out of college. I have completed my Masters degree at Georgia State in Mathematics and completed a Specialist degree at Lincoln Memorial University in Educational Leadership. I have currently now have four kids."

**Alec Burke-'17-**"I currently work at ThirdChannel as the Field Team Logistics Specialist."

**Amy Good Robbins'14-**"I recently made a job move over to Hulu. I was previously working at a marketing research firm, Bovitz, but have since joined Hulu as a Consumer Insights Analyst doing research in the Marketing department. I love my job!"

Another fun fact, Amy will be returning to Elon to speak at our 2019 Welcome Dinner in October!



# What is your favorite memory from Elon?



Loved, loved working with Dr. Richard Hayworth!! He was the one who asked, "Have you ever considered becoming a math teacher?" I remember that the only preparation I got for teaching Geometry (for my first 20 years) was NON-Euclidean Geometry as an Elon sophomore. Loved being a Fightin' Christian! Loved how demonstrative Mr. Barbee was in Stat class - he really loved Stats! Loved getting paid to tutor Math in the LRC. Loved finally moving out of Carolina dorm after freshman year. Wouldn't trade my Elon College experience for anything!!!!!!!!!!!!!!!!!!!!!!

My favorite Elon memory would be after I graduated when Dr. Lambert made himself available for me to meet with him in August. I did not know what I would be doing after Elon at that time and he provided advice to me that will stick with me forever. My other favorite memory would involve the Odyssey scholars program of Summer Bridge before my first year and then our senior brunch before graduation where my brother was able to address my cohort.

My favorite memory was returning to campus from studying abroad and just being overwhelmed with the feeling that Elon was HOME and being so grateful for all of the friends I had there, the wonderful professors and leaders, and the beautiful campus.

## 2019 Elon College Distinguished Alumni Awarded to Wallace "Wally" C. Sawyer '64

Wallace "Wally" Sawyer graduated from Elon in 1964 with degrees in Physics and Mathematics. Afterwards, he pursued a graduate degree in physics from the College of William & Mary. He took an internship at Langley Research Center in Virginia in 1965, which led to the start of his NASA career as an aerospace engineer. Actively engaged on the cutting edge of high-speed supersonic research, he spent almost four decades working for the National Aeronautics and Space Administration. During the following 37 years, he served on multiple roles including as director of the High-Speed Research program office, where he was responsible for leading the development of critical technologies in aerodynamic performances, airframe materials and structures, flight deck technology, propulsion technology and system integration to support the development of high-speed civil transport.

He also served as deputy director of NASA Dryden Flight Research Center at Edwards Air Force Base in California, deputy director of the Langley Research Center in Virginia and special assistant to the director of Kennedy Space Center in Florida. He retired in 2002 but continued serving NASA for several years in an advisory capacity. He has authored or co-authored 45 technical publications and a chapter in a technical textbook and also serves as an associate fellow of the American Institute of Aeronautics and Astronautics. Wally's excellence in leadership has been recognized over the years through a series of awards including the NASA Equal Employment Opportunity Medal, NASA Outstanding Leadership Medal and NASA Distinguished Public Service Medal, as well as the Presidential rank of Meritorious Executive.

At Elon, Wally was actively engaged with his 50th class reunion and previously served on the National Alumni Executive Board from 1999–2002. He and wife Rae live in Tampa.

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

### Elon Mathematics (and future Statistics) Department in 1959



Duke Science Building (1923)



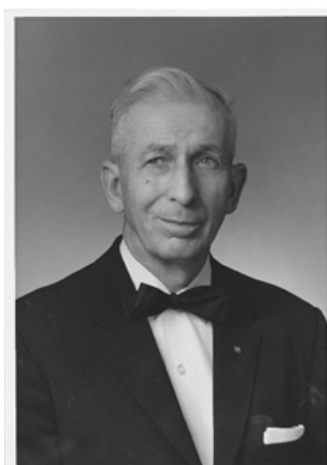
Albert Fisher



Jane Evans

Bob earned his degree while playing 5 years of football under the notoriously difficult taskmaster Sid Varney. Football was the vehicle Bob used to gain a foothold in life. It allowed him to walk through doors that he otherwise could not have. Bob says that he will always remember his 5 wonderful years at Elon and that he is so proud of how the small college he attended has expanded in so many ways to the outstanding university we have today. Elon College was the greatest experience of his life.

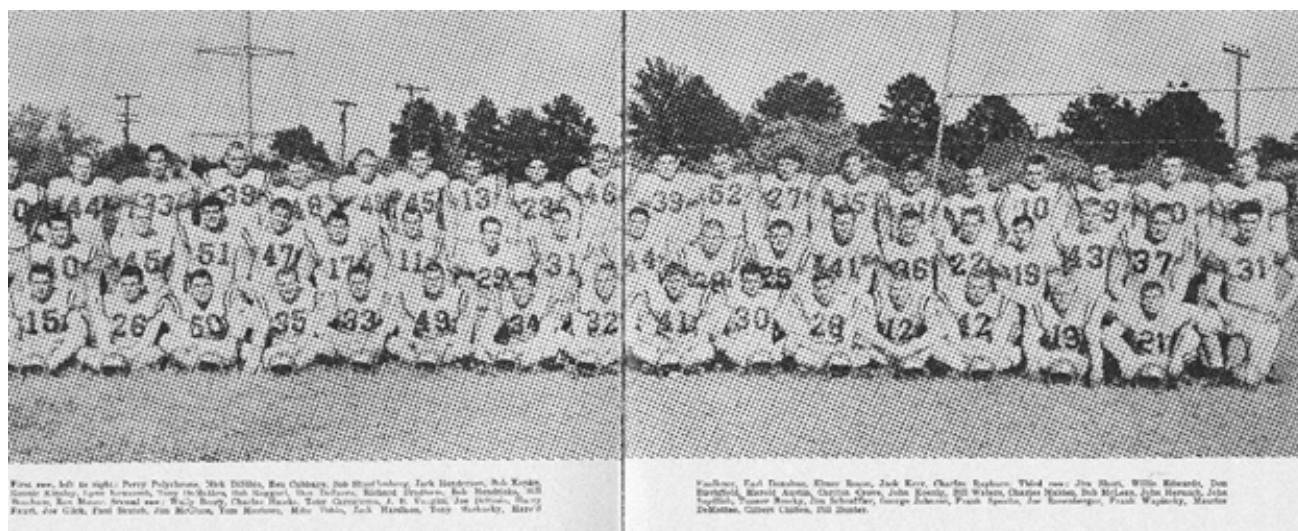
We are happy to hear from alumni Robert J. (Bob) Ruggeri '59 who reflected on his experiences at Elon. After graduation, Bob taught high school Math and Science in New Jersey and then entered the field of Computer Systems and software development with Merck & Co, Inc. Bob retired in 1998. He notes being inspired by two of his Math professors at Elon, Dr. Fisher, who often stopped Bob in the hallway to chat about various going ons. The fact that I thoroughly enjoyed math so much more than probably had a lot to do with my positive feeling toward Dr. Fisher. Bob's other favorite math instructor was Ms. Evans. Two other professors who Bob thought were outstanding were Dr. West who taught English and Dr. Hook who taught Physics.



A.L. Hook



John West



Special Thanks to Randall Bowman and the Elon Archive.



# *Spotlight on Students*

Congratulations to our 35 graduating seniors! Many have lined up exciting careers or will attend graduate school.

Those attending graduate schools include: **Samuel Glick** (University of Kentucky), **Emily Cooper** (University of Colorado Anschutz Medical Campus), **Aidan Draper** (University of Notre Dame) and **Lauren Silverman** (Columbia University).

Those entering the workplace include: **Briana Brady** (Fast Enterprises, Denver, Co.), **Morgan Ferguson** (EY, Charlotte, NC) **Isabel Gesen** (Harvard Pilgrim Health Care Wellesley, MA) **Madison Jaudon** (Fidelity Investments, Raleigh NC) **Sarah Kapinos** (Fidelity Investments, Durham NC) **Joseph Keating** (EY, Charlotte, NC) **Lauren McMahon** (FactSet, New York, NY) **Matthew Saviano** (EY, Boston MA) **Jamie Bottino** (Paul IV High School, Haddonfield, NJ) **Camille Kelley** (Sun Life Financial, Wellesley, MA) **Ben Rogers** (Green Level High School, Cary, NC) **Jacob Crouse** (Federal Reserve Bank of Richmond Richmond, VA) **Joseph Dulaney** (Piedmont Fellows Program, Greensboro, NC) **Olivia Erskine** (EY, Charlotte, NC) **Marcel Fahrenholz** (PwC, Greensboro, NC) **Jack Hartmann** (Raytheon Tewksbury, MA) **Sarah Kapinos** (Fidelity Investments, Durham, NC) **Mikaela Schultz** (Dell EMC, Austin TX) **Brendan Thiry**, (IQVIA, Durham, NC) and **Wanghao Ying** (Software Engineer, Palo Alto, CA)

Congratulations to **Jamie Bottino '19**, **Martha Figueroa '19**, **Madison Jaudon '19** and **Sarah Kapinos '19** on their recent induction to Phi Beta Kappa.

Congratulations to **Martha Figueroa '19**, **Taylor McFadden '20**, **Matthew Mitten '19**, **Sara Murphy '20**, and **Lara Yeast '19** on their recent induction to Phi Kappa Phi.

At a recent dinner to celebrate our graduates, the following awards were given: **Aidan Draper '19**-Outstanding Research Award in Statistics and also the Outstanding Experiential Learning Award in Statistics. **Jamie Bottino '19**-Outstanding Achievement Award in Mathematics. **Marcel Fahrenholz '19**-Outstanding Achievement Award in Statistics. **Morgan Ferguson '19** and **Sarah Kapinos '19** were awarded with the Outstanding Achievement Award in Mathematics and Statistics.

New inductees into Pi Mu Epsilon, the National Mathematics Honor Society include: **Jack Amend**, **Ricardo Blohm**, **Sarah Boggins**, **Briana Brady**, **Mirella Cisneros Perez**, **Nicholas Conrad**, **Emily Cooper**, **Madeline Gall**, **Isabel Gesen**, **Connor Heger**, **Nicole Kister**, **Catherine LoGrande**, **Sara Murphy**, **Isaac Sasser**, **Jonathan Shaw**, **Daniel Yameen** and **Lara Yeast**.

New inductees into Mu Sigma Rho, The Statistics Honor Society include: **Aidan Draper**, **Olivia Erskine**, **Morgan Ferguson**, **Isabel Gesen**, **Angela Jeffers**, **Sarah Kapinos**, **Christopher Laskay**, **Taylor McFadden**, **Lauren McMahon**, **Emma Ott**, **Sierra Paloian**, **Morgan Paul**, **Lauren Silverman** and **Alyssa Smith**.



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



Dr. Karen Yokley, Greg Mader '11 and Dr. Jeff Clark at the Welcome Dinner 11/7/2018.

Greg Mader '11 was our guest speaker at the Welcome Dinner that was held on 11/7/2018 for our upcoming majors. Greg is a Senior Researcher in Health Economics at RTI Health Solutions.



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.



Dr. Mark Weaver, Dr. Jim Beuerle and Prof. Richard Blue eating their "pizza pi" on Pi Day.



"Sweetie Pi" table

Pi Day is a big deal around the Mathematics and Statistics Department. We always have a lot of food, fun and giveaways!!



Graduation that was held in the new Schar Center, May 24, 2019.



In May we held our Senior Celebration where we not only celebrated our seniors, but also our scholarship winners, Department award winners and the new inductees of PME and MSR.

Jamie Speiser '10 was our speaker at the Senior Celebration. Dr. Speiser completed her B.S. in Mathematics at Elon University, M.S. at the Ohio State University, and Ph.D. in Biostatistics at the Medical University of South Carolina. She is an Assistant Professor in Department of Biostatistics and Data Science at Wake Forest School of Medicine. It is always good to have Alum "come home" and talk to our students about their successes.

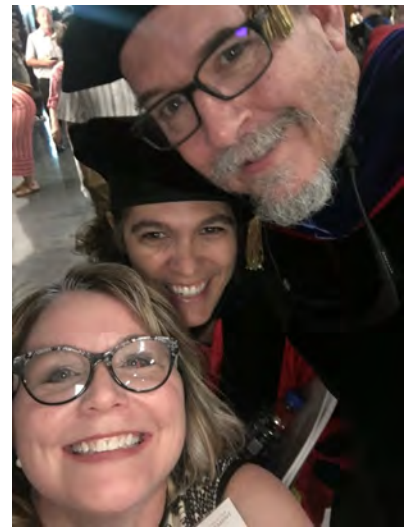


Dr. Jamie Speiser '10





Some of our Department members ready to participate in the Graduation Ceremonies



And the occasional selfie!



After a summer of rest and relaxation here is the Department hard at work in August planning for the year in the Design Thinking Studio.



Sometimes it takes a while for us to get a good picture....



Front Row Pictured left to right: Aaron Trocki, Jeff Clark, Karen Yokley, Jan Mays, Crista Arangala, Kristen Mazur. Back row : Jim Beuerle, Hwayeon Ryu, Mark Weaver, Tracy McBane, Ryne VanKrevelen, Kirstie Doehler, Andi Metts, Chad Awtrey, Alan Russell. Not pictured: Skip Allis, Ayesha Delpish, Insuk Shim, Andrew Dellinger, Akram Adam, Christian Felton, Todd Lee, Laura Taylor, Xinyu Feng, Dane Johnson, Bud Stuart and Joshua Safley.





## Faculty Updates

Assistant Professor of Statistics **Mark Weaver** collaborated with Chris Jones from Rowan University and Timothy Platts-Mills from the University of North Carolina at Chapel Hill, along with other colleagues, to design a new study to investigate one practice that could lead to serious bias in trial publications, so-called "outcome switching." Peer Reviewed Evaluation of Registered End-Points of Randomized Trials (the PRE-REPORT study): Protocol for a Stepped-Wedge, Cluster-Randomized Trial" was published June 1, 2019, in the journal BMJ Open.

Associate Professor of Mathematics **Karen Yokley** led a short course on "Modeling Throughout the Curriculum: Disease Transmission" at the Mathematical Association of America (MAA) MathFest Conference in Cincinnati, OH in August 2019.

**Crista Arangala, Chad Awtrey, Jeff Clark, Kristen Mazur, Aaron Trocki and Karen Yokley** attended the Joint Mathematics Meetings in Baltimore, MD, on Jan. 16-19, 2019.

Lecturers **Andi Metts** and **Ryne VanKrevelen** attended the United States Conference on Teaching Statistics held May 16-18, 2019, at Penn State University in State College, Pennsylvania.

Assistant Professor **Andrew Dellinger** coauthored research on liver injury caused by the antibiotic Trimethoprim-Sulfamethoxazole April 2019.

Professor of Mathematics **Jeff Clark** attended the International Conference on Technology in Collegiate Mathematics, where he presented on "How Technology Can Help Develop Student Writing Skills."

**Jeff Clark**, Professor of Mathematics, attended the annual meeting of the Southeastern Section of the Mathematical Association of America March 7-9 at Lee University in Cleveland, Tennessee. At the conclusion of the gathering Clark concluded his two-year term as chair of the section, which includes Alabama, Georgia, North Carolina, South Carolina and Tennessee.

**Aaron Trocki**, Assistant Professor of Mathematics, presented his research at the Society for Information Technology and Teacher Education in Las Vegas on March 18-22, 2019.

Associate Professor of Mathematics **Chad Awtrey**, math major Peter Komlofske '19, and alumni Christian Reese '18 and Janae Williams '18 have published their article "On Galois p-adic fields of p-power degree" in the most recent issue of the JP Journal of Algebra, Number Theory, and Applications.

"Successful Service-Learning for Statistics Students Studying Survey Sampling" was published by Associate Professor of Statistics **Kirsten Doehler** in the November 2018 issue of the Statistics Education Research Journal.

Associate Professor of Mathematics **Chad Awtrey** and Mathematics major Ashley Pritchard '20 have published a paper in the most recent issue of the International Journal of Algebra.

Associate Professor of Mathematics **Karen Yokley** and Professor of Mathematics **Crista Arangala** and alumna Kelly Reagan '17, recently published an article that uses a mathematical model to describe the transmission of dengue fever among neighboring populations.

**Kristen Mazur**, Assistant Professor of Mathematics and Statistics gives Plenary Lecture at the MAA Regional Math Conference to discuss the positive outcomes of mathematical failure.

Assistant Professor of Mathematics **Hwayeon Ryu** attended the mathematics workshop on "Identifiability Problems in Systems Biology" at American Institute of Mathematics, one of National Science Foundation-funded institutes located in San Jose, CA. Her attendance was supported by American Institute of Mathematics.

**Ryne VanKrevelen**, Lecturer in statistics, presented a speed talk and poster titled "Interactive Examples in Statistics Courses Using R Shiny" at the 2019 Joint Statistical Meetings held July 27 to Aug. 1 in Denver, Colorado. The conference is attended annually by more than 6,000 statisticians.

Associate Professors **Laura Taylor** and **Chad Awtrey** along with six Elon students, and three students from Elon's 2018 Research Experiences for Undergraduates program attended the 14th Annual Regional Mathematics and Statistics Conference held at UNC-Greensboro on Nov. 3, 2018.

Professor of Mathematics **Jeff Clark** attended the Mathematical Association of America's annual MathFest in Cincinnati on July 31 through Aug. 3. While there he met with the Committee on Minicourse which he chairs and supervised the offering of minicourses, in addition to representing the committee on the Council on Meetings and attending the Section Officers' Meeting as Immediate Past-Chair of the Southeastern Section of the Mathematical Association of America.





***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, Adam Kolakowski '11, Alec Burke '17, Amanda Davis '98, Amy Flower '04, Amy Robbins '14, Amy Wagoner '14, Ayesha Delpish, Bethany V. Lake '18, Bobby Beckom '69, Briana Brady '19, Bruce Lobaugh, Camille Kelley '19, Carl Taylor '99, Catherine Maresca '18, Catherine LoGrande '20, Chad Awtrey, Crista Arangala, Daniel Rapp '13, Chip '10 and Caitlin '09 Methvin, Eleanor S. Schlechter, '17, Elizabeth Bentley '12, Emily Cooper '19, Erin Donahue '15, 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, Jane Flythe '69, Janice Ferguson, Jeanette Morky '03, Jennifer Riemer '11, Jessica Kelly '09, Juliet Goodman '18, Karen Ellis '09, Kelly Reagan '17, Lori Tyler '92, Lynne Davis '71, Marty and Laura Callinan '08, Mary C. Hall '10, Mary Macdonald '15, Mary Neill '92, Madeline Edwards, Matthew Ferretti '15, Melissa Gaisser '10, Michael and Colleen LoGrande, Michael O'Brien '16, Micheline Schultz, Stephen and Monica McMahon, Morgan Ferguson '19, Nathan Pool '17, Nicholas Cartossa, Nicholas Harrison '02, Nicole Ciotoli '18, Nihar Deshmukh '22, Ning Dong '21, Olivia F. Lennox-Sanzone '18, Paul C. Kantlehner '16, Philip and Joann Brady, Ralph Mueller '83, Rhonda McFadden, Richard and Judy Haworth, Ronald Earp '56, Rose Prey '01, Ryne VanKrevelen, Samuel M. Rankin '67, Sharon Medeiros '02, Sydney Brown '19, Tammy S. Newbern '94, Andrew and Tina Castellaneta, Todd Lee, Tracy McBane and United Technologies Corporation Matching Gift Program.

## ***CHECK OUT OUR WEBSITE***

To learn about majors, see photos, and get contact information, visit our link at <https://www.elon.edu/u/academics/arts-and-sciences/mathematics-statistics/>. Like our Facebook page at Elon University Math and Stats.

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