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THE NEWSLETTER OF THE DEPARTMENT OF MATHEMATICS & STATISTICS

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August 2017

Laura Taylor Presented with Excellence in Teaching Award



We are proud to announce that Associate Professor of Statistics **Laura Taylor** was recognized by Elon College, the College of Arts and Sciences, with the Excellence in Teaching Award in August 2017. Laura has been serving as the departmental First Year Coordinator for several years. In this role, she supports all of our faculty who are teaching first year classes and does an exceptional job of leading the many faculty who teach STS 110: Introduction to Statistical Reasoning. In STS 110, Laura engages students with demonstrations in StatCrunch and projects that focus on real world data that is tied to the first year Common Reading. She also hosts monthly Math and Munch sessions enticing faculty to share their classroom pedagogies for STS 110. Laura is also an excellent mentor for future statisticians. She regularly mentors both research and internship students. Laura has also established, and advises, both our statistics club and statistics honor society, Mu Sigma Rho. This past year, Laura has taken on the challenge of teaching the Global Experience class as well. In the near future, Laura will be teaching our new Statistical Computing for Simulation and Theory course, a class that many students are looking forward to. Laura also is a prolific researcher. Her citation, with **Dr. Kirstie Doehler**, in the Guidelines for Assessment and Instruction in Statistical Education (GAISE) is a note to her exceptional insight in teaching and curriculum development.

Quotes from some of Dr. Taylor's students:

"The enthusiasm that she displayed excited and motivated me to learn."

"My favorite professor at Elon! Wish I was a stats major! You made stats fun."

"Dr. Taylor is a great teacher. She is so helpful, passionate about statistics, and very willing to help. I love all of the storytelling and activities during class -- made math fun."

This honor is well deserved!
Congratulations Dr. Taylor!



Announcements from the Chair – Crista Arangala



Once again, we would like to thank all of you who have given to the annual fund. With your gifts we were able to award four additional scholarships to mathematics and statistics majors for 2017-2018 and two scholarships for incoming students interested in majoring in math or statistics, as part of our new Scholarship and Mentorship program.

We have made some significant changes to our statistics curriculum over the past year, adding a B.S. in Statistics with a Data Analytics Concentration and a new course entitled Statistical Computing for Simulation and Theory. We will also start our Statistics Practicum in Fall 2018 so if you have any interesting data that you need analyzed think about submitting a project proposal (details can be found on our website).

Exciting things are happening in our Introduction to Statistics classes this year as well. Faculty teaching this course will be participating in a book discussion focused around "The Lady Tasting Tea: How Statistics Revolutionized Science in the Twentieth Century" by David Salsburg. We will also start a statistics forum in Spring 2018.

Finally, we are happy to announce that our new study room, in Duke 304, is up and running with tutors for math and stats major classes during the week and new fun furniture. We hope to increase the traffic in this room this fall.

Ralph Mueller '83 recognized as Elon College Distinguished Alumnus in the Natural, Mathematical & Computing Sciences

Mueller serves as vice chancellor for academic affairs and provost at Purdue Northwest University in Indiana. A native of Germany and one of Elon's first international students, he earned his degree in mathematics and minor in computer information systems from Elon in 1983. He went on to pursue a master's degree in mathematics from Wake Forest University in 1984 and a doctorate in research methodology from Virginia Tech in 1987.

A consummate educator, throughout his 29-year career in higher education Mueller has served as a tenured faculty member of applied statistics with joint appointments in education, psychology and public policy/public administration. At Purdue Northwest, he oversees an institution of six colleges and 70-plus undergraduate and graduate degree programs, after the unification of two regional Purdue schools into a single university. Prior to that appointment, Mueller served as dean of the University of Hartford's College of Education, Nursing and Health Professions in West Hartford, Connecticut, for seven years. There he served as founding director of the university's Institute for Translational Research, a multidisciplinary umbrella for collaborations among faculty, students and community partners. Mueller is a prolific scholar, having published numerous books and peer-reviewed articles.



Ralph Mueller '83 (center) and his mentors in the Elon Department of Mathematics, Dr. Richard Haworth and Dr. Gerry Francis

SPOTLIGHT ON STUDENTS

Congratulations to our 34 graduating seniors. Many have lined up exciting careers or graduate studies. Those attending graduate school include: **Sydney Lawton** (Master's in Analytics at NC State), **Nathan Pool** (Ph.D. in Computer Science at NC State) **Kelly Reagan** (Ph.D. in Systems Modeling and Analysis with a concentration in Mathematical Biology at Virginia Commonwealth University), **Rebecca Venetianer** (Master's in Biostatistics at Columbia University) and **Rebecca Yarborough** (Master's in Quantitative Methods at Columbia University).

Those entering the workplace include **Nicole D'Amora** (Credit Suisse in Raleigh, NC), **Erik Euler** (Booz Allen Hamilton in McLean, VA), **Jennifer Faig** (The Federal Reserve in Washington, DC), **Sara Galinko** (Access Eye Center in Warwick, RI), **Alexis Goslen** (Credit Suisse, New York), **Ashley Hill** (ARCA Worldwide, Mebane, NC), **Holly Holsopple** (Teacher with the Alamance-Burlington School System), **Peter Jakes** (Allstate, Chicago, IL), **Amalia Llorente** (Wayfair, Boston, MA), **Rachel McGovern** (Partipate Dance Program, Los Angeles, CA), **Erin Murnane** (Naval Research Laboratory, Washington, DC), **Jenifer Rhodes** (Infosys, Plano, TX), **Sammi Schlechter** (Fidelity Investments, Raleigh, NC), **Alexandra Stone** (Bank Mobile, New Haven, CT), **Emily Swanson** (OpAns LLC, Durham, NC) and **McLean Warren** (Dan Ryan Builders, Raleigh, NC). Congrats and good luck to all of our grads!

Congratulations to **Jennifer Faig** '17, **Peter Jakes** '17, and **Emily Swanson** '17 in their recent induction in Phi Beta Kappa.

At a recent dinner to celebrate our majors, **Taylor Cesarski** and **Alexis Goslen** were presented with the Outstanding Achievement Award in Mathematics. **Peter Jakes** and **Kelly Reagan** were presented with the Outstanding Research Award in Mathematics.

In Statistics, **Sydney Lawton** was presented with the Outstanding Academic Achievement Award and the Outstanding Research Award.

New this year, students were chosen for a Departmental Award. **Jennifer Faig** and **Peter Jakes** were both presented with the Mathematics and Statistics Outstanding Achievement Award.

New inductees into Pi Mu Epsilon, the national mathematics honor society include: **Jamie Bottino** '19, **Nicole Ciotoli** '18, **Jacie Cooper** '18, **Ryan Corning** '18, **Emily Gaa** '18, **Juliet Goodman** '18, **James Greenwell** '18, **Erin Kost** '18, **Sydney Lawton** '17, **Olivia Lennox-Sanzone** '18, **Benjamin Rogers** '19, **Kiley Shannon** '18 and **Emily Swanson** '17.

New inductees into Mu Sigma Rho, The Statistics Honor Society includes: **Michael Bernetti** '18, **Alexandra Bernosky** '17, **Emily Cooper** '19, **Jamie Klauber** '18, **Angeline Sanders** '18, **Mikaela Schultz** '19, **Alexandra Stone** '17, and **Brenden Thiry** '19. Congratulations to all of these students!



The new members of Mu Sigma Rho 2017



The new members of Pi Mu Epsilon 2017

A fun night celebrating our seniors!



Richard and Judy Haworth with the winners of the Richard Carlisle Haworth Mathematics and Statistics Scholarship.



Dr. Lee with his research students



So glad these ladies came back to join us! We miss you Helen and Bernice!



Dr. Talitha Washington, Associate Professor of Mathematics at Howard University delivered some encouraging words to our seniors.



Tracy is so happy about giving the seniors their gifts from the Math and Stats Department!



Dr. Arangala with her research student, Kelly Reagan



News from Alumni



We love to hear from our alumni! Please keep us updated on family, education and employment! Send updates to Tracy McBane at tmcbane@elon.edu or Crista Arangala at ccoles@elon.edu.

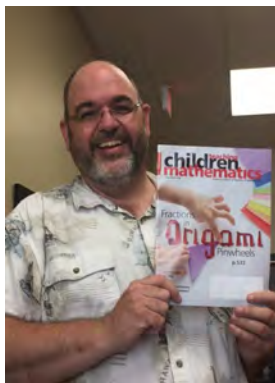
- ❖ Melissa Gaisser '10 transferred from Business Intelligence Developer to Data Scientist at Epic Systems Corporation and is now doing work on healthcare predictive models.
- ❖ Josh Rowan '04 "still rocking being a high school Math teacher."
- ❖ Shaun Lynott '03 daughter Nora just celebrated her first birthday February 2!
- ❖ Eric Goding '16 is currently in his second semester of UNC Chapel Hill's Master's Program in Statistics and Operations Research and is adjuncting for our department this fall!
- ❖ Amy Flower '04 received her MBA last year and is "generally working to create a more tolerant world--math is the true common language!"
- ❖ Lori Tyler '92 has completed coursework for her Ed.D. in Educational Leadership at Appalachian State University. She has worked at Appalachian full time for 11 years as the Director of Summer Ventures in Science & Mathematics.
- ❖ Ashley Trent McHale '01 "I had another baby! Luke was born in May 2016 (five days after my birthday) and loves his older sister Grace."
- ❖ Dan Borgia '15 is working as an Application Developer at JPMorgan Chase in Columbus, Ohio.
- ❖ Kristen Koenig '11 finished her Master's in Mathematics in May of 2016 through Texas A&M's online program.
- ❖ Kathleen Iwancio Lovin '03 is in her fifth year teaching full-time at Johnston Community College.
- ❖ Shelly Schad '09 has completed work to become a Fellow of the Casualty Actuarial Society (FCAS)



Jeanette Morky '03 "I am happy to share the news of my son's birth for the newsletter. Austin James Mokry was born May 3, 2017 at 11:14pm, 8 lbs 14 oz, 21.5 inches."

- ❖ Jamie Speiser '10 earned a Ph.D. in Biostatistics from the Medical University of South Carolina in June and has accepted a tenure-track assistant professor position at Wake Forest School of Medicine in the Biostatistics Department.
- ❖ Amanda Ketner '11 graduated from Peabody School of Education at Vanderbilt in May with an M.Ed. in International Education Policy and Management with a graduate certificate in Latin America Studies. Specifically focused on the role of education in development in Central America and did her thesis on a program evaluation of a professional development program for primary school teachers of students with disabilities in rural Honduras. She will be moving to Ann Arbor at the end of the month to attend the University of Michigan to pursue a dual-degree program of a Ph.D. in Quantitative Research Methods of Education with a concentration in education policy and a M.A. in Statistics. She will also be an IES Predoctoral Fellow, an interdisciplinary fellowship that provides training in causal inference applied to education policy. Apart from academics, she and her boyfriend adopted two absolutely adorable kittens, named Raleigh and Taco.

FACULTY UPDATES



Professor **Alan Russell** published "Fractions in Origami Pinwheels" in the May 2017 issue of *Teaching Children Mathematics*. Russell also presented "From Rabbit Ears to Origami Flowers: Triangle Centers and the Concept of Function" at Bridges Waterloo 2017: Mathematics, Music, Art, Architecture, Education, and Culture in Canada. His work will also be published in the peer-reviewed conference proceedings.

A.L. Hook Associate Professor **Chad Awtrey** gave a "Distinguished Lecture for Students" at the MAA Sectional Meeting at Mercer University in March. In June, he started his new role as Associate Director of Undergraduate Research at Elon. In July, he was re-elected to a three-year term as a councilor for the Council on Undergraduate Research. Also in July, he was elected to a three-year term on the Executive Council of Pi Mu Epsilon as the National Secretary-Treasurer. Along with Robin French '15, he received a Dolciani Mathematics Enrichment Grant from the MAA to work with the Williams High School Math Club (for which Robin serves as advisor) to offer enrichment activities to high school students, including participating in math contests and engaging in research projects with Elon math majors.

Professor **Jeff Clark** attended the Mathematical Association of America's annual MathFest in Chicago July 26-29, 2017.

While there he attended a meeting of the MAA's Section Officers as Chair of the Southeastern Section, attended a meeting of the MAA's Committee on Minicourses which he will chair as of 2018, monitored a minicourse for the committee, and presented a paper entitled "Rationals, Irrationals, and Commensurate Magnitudes: Euclid and the Real Numbers".

Professor **Jim Beuerle** presented "Using Kahoot! in your Classroom" in the Special Session on Research on Teaching and Learning in Collegiate Mathematics. Beuerle incorporated a Live Kahoot! session with interactions from the audience. His talk addressed the pros and cons of the technology and how it was used in an Intro Statistics class in the Spring of 2017. Additionally, Beuerle participated in a workshop for "The Directors of Mathematics Tournaments" since he is co-chair of the NCCTM State math contest committee. Beuerle also served as an excellent bus driver for 12 of the Elon conference attendees.



While at this conference the Math Jeopardy team won third place in the contest. Here they are sporting the trophy and the outdated placard referring to us as "Elon College."

Professor **Ryne Vankrevelen**, and Professor **Laura Taylor**, presented a talk titled "Extending Hands-On Activities Using StatCrunch to Teach Statistical Inference" at the 29th International Conference on Technology for Collegiate Mathematics in Chicago, Illinois, on Saturday, March 11, 2017. The talk was based on a study the pair conducted with **Heather Barker**, instructor in mathematics, during the Winter 2017 term. The study aimed to incorporate hands-on activities in the MTH 110 course which were extended using simulation methods in the online platform, StatCrunch.

Andi Metts, Heather Barker, Kristen Mazur, Laura Taylor, Lisa Rosenberg and **Ryne VanKrevelen** attended the United States Conference on Teaching Statistics at The Pennsylvania State University in State College, Pennsylvania, on May 18-20, 2017. The theme of the conference was "Show me the Data" and additionally, the importance of statistics in the emerging field of data science was a main topic of discussion. This conference was co-sponsored by the Consortium for the Advancement of Undergraduate Statistics Education (CAUSE) and the National Institute of Statistical Sciences (NISS).

Professor **Aaron Trocki** presented at The Twenty-First Annual Conference of the Association of Mathematics Teacher Educators in Orlando, Florida in February. His presentation title was Shaping Teachers' Perceptions of Task Quality in Dynamic Geometry Environments. He also published an article in the proceedings of the Society for Information Technology & Teacher Education International Conference in Austin, Texas. Article title: Enhancing Technological Pedagogical Content Knowledge in a Technology for Teaching Mathematics Course. March, 2017. In his spare time he has also mentored two Elon students' SURF posters and presentations and one Elon student's SURE poster and presentation.

Professor **Jim Beuerle**, Professor **Jeff Clark**, Professor **Todd Lee**, Professor **Alan Russell** and Professor **Chad Awtrey** attended the 2017 Southeastern Sectional Meeting of the Mathematical Association of America, held at Mercer University in Macon, Georgia, on March 9-11.



Front row, left to right: Destiny Frett '20, Erin Murnane '17, Kylee Gomilla '20, Jim Beuerle. Back row, left to right: Nathan Pool '17, Jeff Clark, Peter Jakes '17, Chad Awtrey, Alan Russell, Nick Hadgis '18, Janae Williams '18, Todd Lee.

We are sad to announce the passing of William "Bill" Barbee on February 14 in Hickory, NC at the age of 78. Bill was a member of Elon's mathematics faculty for 33 years.

A native of Buncombe County, NC, Barbee was a member of the 1955 North Buncombe High School basketball championship team and was inducted into his school's hall of fame in 2015. He went on to play college basketball at Wofford College and was a member of the NAIA District 26 Champion-National Quarterfinal team. He excelled in the classroom, earning a bachelor's degree in mathematics and being inducted into the school's Phi Beta Kappa chapter. He later studied at the University of Tennessee and earned a master's degree in mathematics in 1964.

Barbee joined the Elon faculty in 1970 after teaching at Mercer University. In 1974 he was named the second recipient of Elon's Daniels-Danieley Award for Excellence in Teaching. He was named chair of the mathematics department in 1976, serving in that capacity for two years. He retired in 2003.

Richard Haworth best summarizes Bill's influence on the department. "Bill has been the calm, stable influence. His experience and personal perspectives produce valuable wisdom for all of us. When he speaks in a departmental meeting, we know that his views have been well thought out, and his recommendations are seldom debated." Bill's life can be characterized by a motto attributed to the great mathematician, Frederick Gauss, "Few but ripe."

Bill is survived by his wife of 54 years, Susan McDevitt Barbee; daughter, Beth Camacho and husband Tom of Swannanoa; sons, Bert Barbee of Greensboro, and John T. Barbee of Hickory; sister, Frankie Presley and husband Richard; brother, Tom Barbee and wife Elizabeth all of Weaverville; grandchildren, Caleb Camacho and wife Andrea, Danial Camacho, Caryn and Rebecca Camacho, Brad and Bryan Barbee and great grandson, Aran Camacho.

A memorial service was held in Weaverville, NC on February 18. Bill, we will miss you.



Bill is pictured here with Trustee Emerita Janie Crumpton Evans Reese, who passed away last year as well.

THANK YOU FOR YOUR DONATIONS!

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 spring semester 2017: Glynis Ewing '12, Taylor Ellis '09, Sebastian King '16, Kathleen and Mark Lovin '03, Crista Arangala, Daniel Borgia '15, Marty and Laura Callinan '08, Bob and Carrie Ryan '03, Ayesha Delpish, Matthew Feather '15, Amy Flower '04, Richard Flower, Bernice Foust, Kylee Gomilla '20, Alexis Goslen '17, Todd Lee, Christopher Long '05, Amanda Marusiak '10, Michael O'Brien '16, Joseph Old '71, Daniel Rapp '13, Ronald Russell, Carl Taylor '99, Helen Walton, Jessica Kelly '09, Ricahrd Watkins '71, Angela Leonard '89, International Business Machines, Meredith Webster '96, Robert Hege '68, Horace Holloway '87, Ralph Mueller '83, Amalia Llorente '17, Jennifer Faig '17, Emma Yarborough '17, Lynne Davis '71, Amanda Sherman '98, Elizabeth Bentley '12, Erin Donahue '15, Mary Neill '92, Eric Vetack '88, Rose Prey '01, Abigail Garcia '11, Sara Rodgers '16,

CHECK OUT OUR WEBSITE

To learn about majors, see photos, and get contact information, visit our link at www.elon.edu/o/cj. Like our Facebook page at Elon University Math and Stats. This newsletter is a production of the Department of Mathematics and Statistics at Elon University.

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