Delpish, the first full-time statistics professor hired at Elon, joined the department in 2005 and became the Statistics Program Coordinator. A native of the Caribbean island of Trinidad, she received a bachelor’s degree at Mount St. Mary’s College, where she was the student representative on the board of trustees and received the Mount Leadership Award. She received a Ph.D. in statistics from Florida State University, where she was recognized with the Graduate Student Leadership Award.

One of Delpish’s first tasks at Elon was the development of the statistics minor and then the major. She designed the courses and the structure by researching successful statistics programs from across the country. Once the minor was approved, she actively recruited students into the new statistics classes. In 2007 she led the successful search for two new statistics faculty members. The major was approved and implemented in fall 2010, and the department subsequently changed its name to the Department of Mathematics and Statistics.

Delpish became Department Chair in 2012 and has led the effort to hire additional faculty and to recruit more students for the majors. Not only has Delpish led the way for statistics, she has also been a university leader. She has served on many university committees including Graduate Council and the Faculty Research and Development committee. From 2006 to 2009, she was the Faculty-in-Residence at the International Pavilion.

Delpish has had peer-reviewed publications in Journal of Statistical Research, Academic Exchange Quarterly, and Journal of Quantitative Analysis in Sport. Since coming to Elon, she has given many conference and workshop presentations at national and international conferences. She has mentored 15 undergraduate research students and supervised 12 internships. She has also led study abroad groups to London and Greece.

Even though Delpish now has an office in Mooney, she will continue to teach two statistics courses each year. Congratulations, Ayesha! We have certainly missed you.

Note from the Chair – Crista Arangala

In January of this year, Dr. Ayesha Delpish took on a new and exciting role as Associate Dean of the School of Education. We are very proud of her and know that she will do a great job there. I am completing my first semester of being the new chair of the department and am still learning a lot as we look toward some exciting transitions. In the next year, we hope to be teaching all of the first-year core courses calculator-less. We have spent this past year working on a new five-year plan for 2016-2021 (Yes, 2021! Can anyone else say what they will be doing then?). The plan includes integrating a strong writing component throughout the curriculum and looking to increase our efforts related to marketing the mathematics and statistics majors. This past semester I have been working with our new program assistant, Tracy McBane, and our student workers to get our Facebook page up and running. Check out our Facebook page (Elon University Math and Stats). It includes our new video series, I am an Elon Math/Stats Alumni (or Student). We look forward to highlighting many of you in this series. Have a great year and keep in touch.
AWTRY PROMOTED AND AWARDED

Dr. Chad Awtrey has been promoted to Associate Professor with tenure. Awtrey joined Elon University in 2010 after completing his graduate work at Arizona State University. His main research interests are in algebraic number theory, $p$-adic fields, and computational Galois theory. A passionate advocate of undergraduate research, Awtrey regularly engages undergraduates in problems related to his research field, and he encourages his students to showcase their work through publications and presentations. He has mentored 26 student research projects resulting in 47 student presentations at professional conferences.

From 2013-2015, his undergraduate research mentoring was supported by a grant from the National Science Foundation through the Center for Undergraduate Research in Mathematics. In recognition of this work, Awtrey received the 2014 Early Career Mentoring Award from the Division of Mathematics and Computer Science within the Council on Undergraduate Research (CUR). In 2015 Elon University awarded Awtrey the A.L. Hook Emerging Scholar Professorship in Science and Mathematics, which provides funding and opportunities for faculty to mentor students in research.

A dedicated teacher-scholar, Awtrey received the Dean's Distinguished Teaching Award while at Arizona State in 2008, and he was chosen as a 2010 national Project NExT fellow. From 2012-2014, Dr. Awtrey's SoTL research on Writing to Learn and Writing in the Disciplines was supported by a grant through Elon University’s Center for the Advancement of Teaching and Learning. In 2016 Awtrey received the Award for Distinguished Teaching by a Beginning Faculty Member from the Southeastern Section of the Mathematical Association of America. From 2014-2017, Awtrey will serve as councilor for both CUR and Pi Mu Epsilon (PME), the national mathematics honor society. In addition, he currently serves as co-organizer for the UNC-Greensboro Regional Mathematics and Statistics Conference and as the Business Manager of the PME Journal. He also serves as the Pure Math Coordinator in the department and as a sabbatical replacement on the Elon Core Curriculum Council.

NEWSLETTER EDITOR RETIRES

After 32 years at Elon, Helen Walton is retiring. She initiated the first newsletter in 1996 and has continued publishing it for 19 years. Walton was hired in 1984 and spent her early years teaching Math 100 (Intermediate Algebra) and Math 110 (College Algebra) as an adjunct instructor. In 2010 she was appointed to a task force, which investigated the feasibility of establishing a Phi Beta Kappa chapter at Elon. She became the principal writer of applications in 2003 and 2006. When the 2006 application was accepted for further review, she wrote most of the longer application in 2007 and led the scheduling of a three-day site visit. When Elon received a vote of approval to establish a chapter in 2009, she helped plan the installation and served as the Secretary/Treasurer of the new chapter. In this capacity she established the procedures for inducting new members, planning speaker visits, and keeping records. She received citations from the College of Arts and Sciences and from the Elon PBK chapter for her contributions to the chapter. Last October, Elon University was one of six collegiate chapters recognized as “outstanding” by the Phi Beta Kappa Society at its 44th Triennial Council.

Walton also teamed with Associate Provost Mary Wise to submit a successful SACS reaccreditation report in 2012 and to host the SACS visiting team in 2013. In 2014 Wise and Walton teamed again to revamp the faculty handbook into a searchable on-line format. The completed handbook was activated in March. Recently she received the honor of faculty emeritus.

Walton looks forward to travel and time with family, and she plans to aid in the transition to new Phi Beta Kappa officers in the fall.

CHECK OUT OUR WEBSITE

To learn about majors, see photos, and get contact information, visit our link at www.elon.edu/e-web/academics/elon_college/mathematics_statistics/. Like our Facebook page at Elon Math & Statistics Alum and Faculty.

This newsletter is a production of the Department of Mathematics and Statistics at Elon University.
ANDI METTS BECOMES LECTURER

Andi Metts has been a familiar face in the department since 1998 as an adjunct professor teaching core statistics classes. This year she has taken a full-time lecturer position. Metts received her bachelor’s degree in biostatistics from UNC-Chapel Hill and her Ph.D. in Epidemiology from the Medical University of South Carolina. She has lived in Burlington most of her life. She and her husband Carey “Bubba” Metts, have three children: Kathryn, a sophomore at the University of South Carolina; Caroline, a sophomore at Williams High school; and Grey, a seventh grader at Turrentine Middle School. She has held many leadership positions with volunteer organizations in the community. Her hobbies are gardening and traveling. Metts says that she loves the small classes and the collaborative atmosphere at Elon. She appreciates that everyone is so supportive of each other.

NEW PROGRAM ASSISTANT TRACY MCBANE

Tracy McBane is the new program Assistant for the Departments of Math/Statistics and Computing Sciences. Originally from Graham, N.C., she has lived in Alamance County all of her life and in Gibsonville for 10 years. She received her bachelor’s degree in accounting from Greensboro College and previously worked as Payroll Administrator for Hospice of Alamance-Caswell.

McBane is married to Todd McBane, and they have three children: Morgan, whose main job is being a mom to Brantley (1 year old); Seth, who is training to be a firefighter; and Jason who is completing his freshman year at Western Alamance. She enjoys reading, watching basketball games (especially Elon Basketball), and spending time with family.

McBane’s office area is in the Duke 209 office suite. She greets everyone with a friendly smile. Please come by to say hello.

CLARK ELECTED CHAIR OF SOUTHEASTERN SECTION OF MAA AND RECEIVES ELON COLLEGE AWARD

At the annual business meeting in March, Jeff Clark was elected as the next chair of the Southeastern Section of the Mathematical Association of America. He will serve one year as chair-elect, then a two-year term as chair, followed by a one-year term as past-chair. He served 10 years on the Section’s Executive Committee and on the MAA’s national Committee on Minicourses. The Southeastern Section is one of the largest of the 29 sections of the MAA, and consists of Alabama, Georgia, North Carolina, South Carolina, and Tennessee.

Clark was honored with the Elon College Excellence in Service-Leadership Award, which recognizes a faculty member who “richly contributes to the ongoing welfare and betterment of the college, university and profession,” thereby upholding the educational mission and leadership valued at Elon University. He has served on the University Curriculum Committee for several years, including as chair last year, and was re-elected as the chair for this year.
SPOTLIGHT ON STUDENTS

Congratulations to our 27 graduating seniors. Many have lined up exciting careers or graduate studies. Those attending graduate school include: Shelby Akers (Master’s in Psychology at East Carolina University), Eric Goding (Master’s in Statistics and Operations at UNC-CH), Alexandra Horowitz (Master’s in Analytics at NC State University), Michael Keenan (Master’s in Specialized Economic Analysis at Barcelone School of Economics), Stephanie Lobaugh (MS in Biostatistics at Gillings School of Public Health at UNC-CH), and Emma Luparello (M.Ed. at University of Virginia). Those entering the workplace include Katherine Armstrong (sales representative for Tibco Analytics in Boston), Erin Clough (Live Oak Bank in Wilmington, NC), Amy Heaton (teaching in Maryland), Sebastian King (business analyst for Credit Suisse), Jillian Kronemer (data analytics with Goodwill Industries in Charlotte), Ann Le Houillier (actuarial analyst in the International Consulting Group for Mercer), Julie Merritt (teaching at Summerville High School near Charleston, SC), Sara Rodgers (financial analyst for Wells Fargo in Los Angeles), Sunna Vidisdottir (analytics risk management department for Tryggvamisostóðin, an insurance company in Iceland), Rebecca Voelker (Operations Analyst with Credit Suisse in Raleigh), and Jessica Weed (technical development program for Metlife in Raleigh). Jaclyn DeVincent is taking off the coming year to get married and then will pursue a doctorate in chemistry. Paul Kantlehner is planning to hike the Appalachian Trail before applying to graduate school.

Congratulations to Jaclyn DeVincent ’16, Michael Keenan ’16, Stephanie Lobaugh ’16, and Taylor Cesarski ’17 on their recent induction into Phi Beta Kappa. Seniors Jaclyn DeVincent, Michael Keenan, Stephanie Lobaugh, Sara Rodgers, and Jessica Weed are members of Phi Kappa Phi. At a recent dinner to celebrate our majors, Jaclyn DeVincent received the Outstanding Academic Achievement Award, and Jessica Weed received the Outstanding Research Award in Mathematics. In statistics Sunna Vidisdottir and Stephanie Lobaugh received the Outstanding Academic Achievement Award, and Jenny Faig received the Outstanding Experiential Learning Award. New inductees into Pi Mu Epsilon, the national mathematics honorary, include Sara Dunlap ’17, Jenny Faig ’17, Josselyn Geyer ’18, Alexandra Grasz ’17, Holly Holsopple ’17, Hannah Jacobs ’16, Michael Keenan ’16, Catherine Maresca ’17, Alexia Moore ’17, Erin Murnane ’17, Nathan Poo ’17, Michelle Rave ’17, Kelly Reagan ’17, Alexandra Stone ’17, Melody Titus ’17, Peter Traunfeld ’17, and Katrina Weil ’18. Michael Keenan, Sara Rodgers, and Jessica Weed received the PME research award. See page 7 for Mu Sigma Rho inductees.

Our majors have been prolific presenters at local and national conferences this year. Taylor Cesarski ’17, Kelly Reagan ’17, and Jessica Weed ’16 presented their summer research projects at Elon’s Summer Undergraduate Research Experience poster session on July 24, 2015. Jessica Weed presented in August in Washington, D.C., at MathFest 2015, the national conference of the Mathematical Association of America. She spoke on “Galois groups of degree 15 p-adic polynomials.” She collaborated with Sara Rodgers ’16 and Nicole Soltz ’17 and was co mentored by Chad Awtrey and Kristen Mazur. Their corresponding research article was published in the most recent volume of the International Journal of Pure and Applied Mathematics.


Ann Le Houillier ’16 has passed the first part of the actuarial exam. Sydney Lawton ’17, Allie Stone ’17 and Jenny Faig ’17 been chosen as interns in the Love School of Business’ Center for Organizational Analytics working on data cleaning and preparation, statistical research, descriptive and predictive modeling, visualization, and report writing under the supervision of a faculty member. Jenny Faig has an internship with T.R. Price this summer.
FACULTY UPDATES

Qi (Excel) Li was approved for continuance in his lecture track at the end of his four year review. He plans to spend the summer in China comparing educational practices in China to the United States. He serves as a sabbatical replacement for the Faculty Research and Development Committee.

Jeff Clark spoke on “Revising for Clarity” on incorporating writing in math courses at MathFest last August in Washington D.C. His son, David is a rising sophomore at Stoney Brook University in Long Island, majoring in applied math.

Aaron Trocki published a research report and presented at The Society for Information Technology and Teacher Education Conference in Savannah in March. He received a writing award and presented research at The National Council of Teachers of Mathematics Annual Research Conference held in San Francisco in April. He also was a contributing author in an article published in The National Council of Teachers of Mathematics journal, Teaching Children Mathematics, titled “Supporting Sense-Making with Mathematical Bet Lines.”

Jim Beuerle and Kirstie Doehler were the leaders of the annual math contest for high school and middle school students in April. Forty-nine students from 12 schools competed.


Laura Taylor, the first year coordinator in the department, coordinated the Math and Munch Lunches where faculty meet to talk about Math 110. Lisa Rosenberg serves on the Judicial Honor Board and Administrative Hearing Appeals committees.

Jan Mays is helping with the accreditation report for the School of Education. She is the Secondary Math Licensure coordinator for the department.

Alan Russell published “The shape Snacker: A bite of Origami and Math” in Bridges 2015: Mathematical connections in art, music and Science conference proceedings. His art was accepted for the Bridges website. His daughter, Michelle, is valedictorian of her high school class. She will attend Elon this fall.

Karen Yokley and Crista Arangala have teamed to write a new calculus lab book titled Exploring Calculus: Labs and Projects with Mathematica (Textbooks in Mathematics), an instructor resource book which will be available on Amazon this summer. Arangala presented a related talk titled “Exploring Linear Algebra: Labs and Projects with Mathematica.” at the Joint Mathematics Meetings in Seattle in January. Arangala and Yokley are working on another book on modeling using Mathematica. Arangala taught an advanced topic in math modeling through a program called Preparation for Industrial Careers in Math Sciences funded by the National Science Foundation. Yokley and students, Andrew Fischer ’14, and Adrienne Rouiller ’13, and AT&T Professor Nick Luke, recently published an article, “Computational sensitivity analysis on a mathematical model of epileptic seizures” in BIOMATH. Yokley also presented her toxicology research at the Biology and Medicine through Mathematics Conference at Virginia Commonwealth University in May.

Todd Lee has been named the Elon Faculty Fellow of Technology. He taught a class with his wife, Hollylynne, in Prague presenting technology information to non-technical people. He has also served as Chair of the Promotions and Tenure Committee. He presented at the Ninth International Conference on Teaching Statistics in Flagstaff Arizona last July. His talk was titled “Visual representations of Empirical Probability Distributions When Using the Granular Density Metaphor.”

Skip Allis has been serving on Academic Council. He has 42 cats including 12 of his own and 30 foster cats from Juliet’s House Animal Rescue. He spends much of his free time taking care of the cats.

Kristen Mazur was married last July and went to Hawaii on her honeymoon. Her husband is a post-doctoral fellow at UNC-CH. She presented at the University of Kentucky at a topology seminar.
Amanda Brown Marusiak ’10 Receives Young Alumni Award

For the sixth year, Elon’s Top 10 Under 10 Alumni Award program has recognized the professional achievements and personal journeys of 10 extraordinary young alumni. The program highlights and celebrates alumni who have graduated within the past decade and are distinguished in their professions and invested in the future of Elon and its community. The 2016 recipients includes Amanda Brown Marusiak, a 2010 graduate in mathematics and member of Phi Beta Kappa.

Amanda was always talented in math and passionate about service, but it wasn’t until she came to Elon that her interests and skills collided, guiding her to a career in a field she didn’t even know existed. Her interest in global development led her to become a Periclean Scholar. Her cohort’s project was to sustainably support the construction of a health center in rural Ghana, which inspired her undergraduate research in mathematically modeling the spread of malaria. Thanks to faculty mentors, study abroad and research experiences, as well as the Periclean and Lumen Scholars programs, she found her calling in public health.

After graduation, Amanda obtained a master’s degree in epidemiology at the University of Texas at Houston, and for the past five years, she has worked to prevent infectious disease illness and outbreaks from affecting ExxonMobil workers through data-driven public health programs. Focusing on malaria, tuberculosis and infectious disease outbreaks like avian flu and Ebola, her team provides public health support to the company’s global operations. She returned to Texas in 2015 after spending two years in South Korea, where she worked with the recent Middle East Respiratory Syndrome outbreak.

OTHER NEWS FROM OUR ALUMNI

Ralph Mueller ’83 has been promoted to Vice-Chancellor at Purdue University Northwest.

Rose Cordero Prey ’01 and her husband, Kevin, welcomed their second son, Henry (“Hank”) Robert Prey, to their family on January 12. Their firstborn son, Nate, was two years old this spring and is the best big brother.

Briana Yoho Long ’05 and her husband, Chris, welcomed their second child, Olivia Leann, in May.

Dana Redmon Watson ’96 has been teaching math for 20 years at East Forsyth High School. Her daughter is in 7th grade and her twin boys are in 3rd grade. All three love math!

John Marshall ’01 has worked at the National Security Agency (NSA) since 2004. John completed a Master’s degree in Computer Science and had a one-year stint as a defense contractor before joining the ranks at the National Security Agency. He has spent half of his career at NSA living and working overseas. He has enjoyed diverse opportunities including working in cyber-security research, supporting military operations, and providing technical assistance to various government agencies. John is currently a product manager in the Technology Directorate and is happy to report that he works daily with fellow computer scientists and mathematicians.

Cara McAllister Ashby ’04 teaches math at Mount Pleasant High School in Cabarrus County, currently Math I and AP Statistics. She became a National Board Certified Teacher this year. She has two children, Emma, 5, and Dean, 3.

Kristin Mandella Cowell ’07 and her husband, Robbie, welcomed their first child, Kinsley Rae Cowell, last August. Kristin is still a cost analyst for the Naval Center for Cost Analysis. She is glad to help any graduating senior who might be interested in work with the NCCA. NCCA is always looking for recent college graduates to start in the government’s three-year intern program.

Joe Simmons ’10 has been working at Analog Devices in Greensboro as an electrical engineer for the past three years. He and his wife had their first child, Zachary Ryker Simmons, last October. His wife is staying home with Zach full-time for now, and they are enjoying their time with the little one.

Jackson Moore ’11 is working at State Farm Insurance as a data analyst. In his spare time, he participates in three volleyball leagues and occasionally tutors high school algebra. His fondest memory of Elon is playing “noon-ball” with professors in Jordan Gym.

(Continued on page 7)
Sam Jennings ’11 is working on his Master’s in Education in Curriculum and Instruction with an add-on licensure in school administration from UNC-Wilmington. He will finish the M.Ed. this fall and the add-on in the fall of 2017. Sam was married in October and is in his fifth year teaching Honors Math II and AP Statistics at South Brunswick High School in Southport, NC. He has been the swim coach there for four years and was named Conference Coach of the Year for the second year in a row this season.

Amanda Ketner ’11 is pursuing a Master’s in Education in International Education Policy and Management at Vanderbilt University and is scheduled to graduate in May 2017. This summer she will work in rural Honduras with a development agency called Un Mundo doing program evaluation for their special education project.

Greg Mader ’11 is a doctoral student in biomathematics at NC State University. He spoke to students and faculty at Elon in February about his life as a graduate student.

Stephanie Gronewoller ’12 has been working at the Johns Hopkins University Applied Physics Lab for four years. She is a software developer for U.S. Department of Defense sponsors such as the Army and the Navy. Last May she graduated with a Master of Science degree in Computer Science from Johns Hopkins University.

Adrienne Rouiller ’13 graduated with a Doctor of Pharmacy from MCPHS University in Boston in May. She obtained a pharmacy residency position at Albany Medical Center in New York for next year.

Future alumni updates should be sent to Tracy McBane (tmbane@elon.edu) or Crista Arangala (ccoles@elon.edu).

MU SIGMA RHO, STATISTICS, HONORARY, INSTALLED

Mu Sigma Rho, the national honorary society for statistics, held its first induction at Elon on May 4th at the department’s award dinner. Its purpose is the promotion and encouragement of scholarly activity in statistics and the recognition of outstanding achievement among the students and instructional staff in eligible academic institutions. Mu Sigma Rho involves graduate students at all levels, undergraduates, faculty, and professional statisticians. Activities include outreach and service to the profession. There are 31 chapter across the nation, and Elon’s chapter is the second in North Carolina. President Jenny Faig and Vice President Nicole Ciotoli have submitted the paperwork to be recognized as campus organization. Dr. Laura Taylor serves as advisor to the chapter.

A chapter of Mu Sigma Rho may be chartered only in an academic institution whose standards are excellent in all departments and particularly so in statistics as indicated by the quality of its faculty, academic standards, and equipment. Elon formed a statistics club last year, a requirement for the MSR application. Qualifying schools need to have at least five students majoring in statistics, at least 14 semester hours in statistics required for the major, at least one person with a Ph.D. in statistics or a related field, and the endorsement of the department chair. The qualifications to join Mu Sigma Rho includes the following:

- At least two years of college course work
- At least eight semester hours of statistics courses, of which at least five semester hours shall be junior level statistics course work
- A 3.25 grade point average (on a 4.0 scale) in all undergraduate level statistics courses (next year 3.40)
- In the top 1/3 of the class (junior, senior) in all course work. (Next year GPA must be 3.20 in all undergraduate courses.)

The following students were inducted this year: Ameya Benegal, Harrison Chabinsky, Nicole Ciotoli, Nicole D’Amora, Jenny Faig, Eric Goding, Alexandra Horowitz, Peter Jakes, Sydney Lawton, Ann Le Houillier, Stephanie Lobaugh, Sunna Vidisdottir, Rebecca Voelker, and Jessica Weiss.
DOEHLER RUNS IN BOSTON MARATHON

Dr. Kirstie Doehler qualified for and ran in the Boston marathon, the oldest annual marathon. To enter, she had to have a running time for her age group of at least three hours and 40 minutes, but there were so many entries that the qualifying time was actually two minutes faster. Of about 9825 runners in her age group, she placed in the top third.

Doehler began running in the seventh grade by joining her middle school cross country team. She continued to run in high school and college. When she moved to North Carolina for graduate school, she entered marathons in Charlotte in 2006 and 2014, but she took time off from running when her children were young. She ran about 40-50 miles per week to train for the Boston Marathon.

Doehler said that the 26.2 mile course was grueling. The first half was mostly downhill, but then the course changed to a series of hills with the last six miles being the worst. Water stops were available every few miles. Doehler finished in three hours, 37 minutes. She probably won’t run next year because of the time commitment. But she plans to keep running because it is good for her physical and mental health. Way to go, Kirstie! You inspire us all!

THANK YOU FOR YOUR DONATIONS!