

# Math Musings

The Newsletter of  
the Elon Math  
Department  
Volume 11  
June 2007

## Math Majors Receive Four Undergraduate Research Prizes at Regional Conference



First row: Professor Lisa Beuerle, Dr. Ellen Mir, Abby Lauer, Karen Hooper, Kristin Souther, Kristin Mandella, Dr. Crista Coles.  
Second Row: Dr. Jim Beuerle, Dr. Jeff Clark, Laura Sinden, Jessica Stewart, Olivia Bolen, Joanna Zanetto, Sarah Holmes.  
Third Row: Patrick Davis, Matt Christian, Dr. Todd Lee, and Nathan Shemonski.

While most students were cramming for their last midterm or polishing their final paper before spring break, Elon's Math Majors were showing off their research at Georgia Southern University. In all, 12 students and 6 faculty made the trip to the five-state MAA Southeastern Conference. Elon always makes a big showing at this annual conference, contributing numerous student and faculty presentations to the conference proceedings. Seniors Patrick Davis, Sarah Holmes, and Joanna Zanetto, and sophomore Jessica Stewart presented their posters to receptive crowds. Matthew Christian, Kristin Souther, Kristin Mandella, and Olivia Bolen also gave presentations.

"Having the opportunity as a sophomore to present my research at the poster session was exciting, but also very intimidating," said Jessica. "I received a lot of good feedback and insight from other math students and professors, which made me feel that all of the hard work I had put into my research was worthwhile."

There was no shortage of recognition for Elon's students as they received an impressive four of the nine prizes awarded to undergraduates. Kristin Mandella (Advisor Dr. Crista Arangala) received a prize for her poster titled "Who Pecks Whom?" and Matthew Christian (Advisor Dr. Todd Lee) received a prize for his poster on the "Analysis of a Random

Walker Method for Ranking College Football Teams." Olivia Bolen (Advisor Dr. Alan Russell) received an award for her presentation titled "Can a Non-Circular Wheel Provide a Smooth Path?" and Kristin Souther (Advisor Dr. Richard Haworth) was also recognized with an award for her presentation on "The Possibility of Impossible Pyramids." "Elon students have consistently led the way at this conference. They make us proud," said math department chair Dr. Jeff Clark.

During the second night of the conference, Georgia Southern's Raptor Center put on a live wildlife program and flight show. Joanna Zanetto and Kristin Mandella were invited to take part in the program by holding a python while the center director discussed common misconceptions about the dangers of snakes. While at the conference students also participated in a math treasure hunt and math jeopardy.

"At first I was somewhat skeptical about spending part of my spring break at a math conference," said junior Laura Sinden. "But after seeing the amazing reputation Elon had created for itself at the conference I realized what a great opportunity this was. I really enjoyed getting to know the math department during the treasure hunt, jeopardy and just socializing. We all had a great time." – **Matthew Christian '07** reprinted by permission from *The Pendulum*

## MORE STUDENT HAPPENINGS

Seven seniors presented their senior seminar presentations in November:

- **Joanna Zanetto** – Red Light, Green Light, Not Just Child's Play
- **Olivia Bolen** – Can a Non-Circular Wheel Provide a Smooth Path?
- **Matt Christian** – Analysis of a Random Walker Method for Ranking Sports Teams
- **Patrick Davis** – When is the Product of Two Oblong Numbers Another Oblong?
- **Kristin Mandella** – Who Pecks Whom?
- **Kristin Souther** – The Possibility of Impossible Pyramids
- **Sarah Holmes** – Where's the Center?

**Matt Christian** and **Kristin Mandella** also presented these topics at the Student Undergraduate Research Forum in April at Elon.

**Jessica Stewart '09** also presented at SURF. Her topic was "Analysis of a Galton Board's Distribution through Modeling in a Virtual World." She built a Galton Board, which is similar to the plinko board on "The Price is Right," and did simulations to explore the distributions resulting with different size boards. **Matt Christian** presented a poster on his research at the AMS/MAA joint meeting in New Orleans.

The math department will graduate three North Carolina Teaching Fellows: **Olivia Bolen '07**, **Patrick Davis '07**, and **Kristin Souther '07**.

**Maria Fedore '08** has an internship with the Shodor Education Foundation in Durham this summer. She will work with a group doing educational workshops and creating educational software.

**Laura Sinden '08** is a Periclean Scholar. She is going to Mexico this winter term (2008) to do service work. This summer she has an internship with the City of Houston. Last summer she had an internship with Baylor College of Medicine.

**Karen Hooper '09** has been selected to participate in Elon's SURE (Summer Undergraduate Research Experiences). Karen will work with **Dr. Ayesha Delpish** to analyze the yield rate of admissions data. They plan a case study approach to data mining and logistic regression as applied to admissions data. **Abby Lauer '09** will also work on this project.

**Matt Christian '07** received the academic achievement and research awards from the math department this spring. He will attend graduate school this fall at UNC-Chapel Hill to study applied mathematics. Matt is graduating as one of Elon's first Honors Fellows, a program which was revamped in 2003.

## ROSALIND REICHARD BECOMES COLLEGE PRESIDENT

**Dr. Rosalind Reichard**, former Elon math professor, will be inaugurated as the 25<sup>th</sup> president of Emory and Henry College on September 21, 2007. Rosalind joined the Elon math department in 1984, serving as department chair and chair of academic council. In 1991, she became the associate dean of math and sciences and supervised the building of McMichael Science Building in 1998. In 2000, she left Elon to become the vice president for academic affairs at Meredith College in Raleigh and later became Meredith's senior vice president. Emory and Henry is a liberal arts college with approximately 1000 students located in southwest Virginia. Congratulations, Rosalind!

## STATISTICS MINOR IS APPROVED

In fall 2006, the faculty approved a new minor in statistics. The minor will add five new courses to the math department's offerings. **Dr. Ayesha Delpish**, who is in her second year at Elon, designed the curriculum and serves as Statistics Program Coordinator. Ayesha has a Ph.D. in statistics from Florida State University and brings the depth of knowledge and teaching talent to move the program forward. Another statistician will be hired during the coming year to assist Ayesha in creating and teaching the new courses.

This spring, two sections of Math 212 (Statistics in Application) were offered for the first time and taught in an innovative way. Ayesha uses a problem-based learning approach by using cases studies to present the material. Students ask questions, think through problems, and propose methods while using advanced statistical software. Topics include introductory design of experiments, data acquisition, inferential techniques, multiple regression, goodness of fit, and analysis of variance.

The minor requires 20 credit hours, of which Math 212 (Statistics in Application) is required. For the next two years, a new statistics course will be added each semester. Courses include the following electives: Math 213 (Survey Sampling Methods), Math 232 (Statistical Modeling), and Math 256 (Applied Nonparametric Methods), Math 325 (Design and Analysis of Experiments, and Math 341 (Probability Theory and Statistics). Other electives include Math 112 (General Statistics – the core course required of most freshmen) or a course from an allied field approved by the Statistics Program Coordinator.

Statistics provides the student with the analytical, communication and computer skills needed to predict trends, summarize complex information, make decisions, and present new ideas. The minor is designed to provide a solid background in Applied Statistics for students who are majoring in all disciplines. More information can be found at <http://math.elon.edu/~adelpish/>.

## DR. FRED STEPHENSON '65 AUTHORS NEW TEXT



**Fred Stephenson '65** has written a new book, *Two 8's, Two 3's, Nothing Wild: Winning the Game of Life* that was published by AuthorHouse in November 2006. This autobiographical book is a true story about how a middle-class American man lived ten distinctive lives and the most important lessons each one taught him. The review on the back cover says that this is "an uplifting book that will put a smile on your face, restore your faith in humanity, and help you find happiness in life." A photo of Fred during his Elon years wearing an Elon T-shirt is featured on the back cover.

After teaching one year at Western Alamance High and 4 years in the Navy, Fred earned MS and Ph.D. degrees in Business Administration from the University of Minnesota, where he majored in transportation and logistics. He then became a professor at Northeastern University (1975-1978) and The University of Georgia (1978-2003). In 1989, he served as a visiting faculty member at the Babcock Graduate School of Business at Wake Forest University, where he taught logistics and marketing. His primary professional interest has been trying to help business leaders and their companies excel. For his contributions to teaching and learning at UGA, Fred received more than fifty UGA teaching honors including twice being selected as a recipient of The University of Georgia's highest teaching honor, the Josiah Meigs Award for Excellence in Teaching (1988, 1997). In 2002, he was honored as the recipient of Elon University's Distinguished Alumnus of the Year award.

Fred and Kittsu Greenwood co-founded Trucking Profitability Strategies in 1986. Since its beginning, he has served as TPS Conference Director. He has testified before the U.S. Senate and U.S. House of Representatives on transportation and marketing matters.

In addition to his recent publication he has authored a principles-of-transportation text, *Transportation USA*. He developed, edited, and partially authored his third book, *Extraordinary Teachers: the Essence of Excellent Teaching*, a book used in America and China to help teachers improve their teaching regardless of subject or grade level taught.

He and his wife, Sharon Smith (Elon class of 1966) have been married for 40 years and have three children, Katie, Jeff, and Dave, a son-in-law, John, a daughter-in-law, Kendra, and five grandchildren. Their son Dave recently became engaged to Sara Seidman, who will make another great addition to the family. In retirement, Fred continues his Appalachian Trail backpacking adventures, tries to work out regularly, has been increasing his woodworking efforts, reads more, likes to travel with Sharon, loves spending more time with family, watches his Georgia Bulldogs, and continues to enjoy TPS and the good times he shares with his trucking buddies.

## SAM RANKIN '67 BECOMES AMS OFFICIAL

### ADVOCATES FOR FEDERAL FUNDING FOR MATH RESEARCH AND EDUCATION

Dr. Sam Rankin's interest in the American Mathematical Society (AMS) has led to a full time position with the organization. He now serves as an Associate Executive Director of the AMS and director of the AMS Washington, DC office, working in government relations. The main AMS office is in Providence, RI. In his current position, he advocates for federal funding for mathematics and science research and education. This requires interacting with Congress, the Administration, federal agencies funding mathematics/science research and education, and other scientific and professional societies and coalitions.

Sam received his PhD in mathematics in 1974 from Vanderbilt University. His research was in the area of differential and integro-differential equations and nonlinear analysis. He published 27 papers and co-edited two books of conference proceedings of papers in these areas. Spending 27 years in academia, he held tenured faculty positions at West Virginia University, Worcester Polytechnic Institute (WPI), where he was department head, and Virginia Tech. He also held visiting positions at the Mathematics Research Center at the University of Wisconsin - Madison and Carnegie Mellon University. From 1985-1987, he served as a program advisor for the Air Force Office of Scientific Research (AFOSR). The AFOSR provides funding for mathematics and science research to academic researchers. As a program advisor, he managed a research portfolio in discrete mathematics and mathematical optimization.

In 1991, he took a leave of absence from WPI and began working for the AMS in Providence, RI. In 1995 he moved to Washington to become the director of the DC office. From 1991 through 1999, he worked for the AMS on leave from his academic institutions. He resigned from his last faculty position in 2000 to become a full-time AMS employee.

Sam drove through Elon's campus last fall and was impressed with all the new buildings and the growth of the surrounding community.

## OTHER NEWS FROM THE ALUMNI

**Aileen Parker Hopkins '67** taught high school math for 17 years. She completed a M.A.T. degree from Duke University in 1971. In 1984 she and her husband adopted a daughter, and Aileen resigned from teaching to stay home with her. She now runs their 122-acre farm where they raise horses and hay. She also competes in combined driving with their ponies. Her daughter is now in graduate school at Virginia Tech working on a Ph.D. in chemistry.

**Carolyn Little '69** taught math in Ft. Lauderdale for 4 years and has been in the insurance business in Roanoke Rapids, NC for the past 32 years. She daily uses the math and people skills she learned at Elon.

**David Scango '73** has been a professor at Northern Virginia Community College for 31 years and is an assistant dean in the Science and Technology Division in charge of the Mathematics Department. This year he moved to a different house across the street from his previous house. He writes that most men would understand...there is a 4-car garage involved!

**Linda Bartlett Moore '78** is director of Health Vendor Operations at Blue Cross Blue Shield of North Carolina. She has held various positions in Finance, Actuarial and Underwriting during her 27 years with BCBSNC. She and her husband Tim ('78) live in Cary and have two children, ages 18 and 21.

**Jane Cooper Colson '80** home schools her children, ages 15, 12, and 10. Her oldest son has been taking geometry this year and is an engineer/scientist/programmer-to-be. Her middle child is musically gifted with perfect pitch meaning that he can hear a note or a car horn or whistle and tell you exactly what note it is. Her youngest is a competitive gymnast, who has participated on a trampoline and tumbling team for the past two years.

**Ghassan M. Ba'baa '82** acquired an MBA degree in eBusiness from University of Phoenix in 2003. He is working on his doctorate in Management of Organizational Development and expects to graduate in 2009. He works for an overseas company as a senior business development consultant related to digital economy in Saudi Arabia.

**Julie McGhee Lindsay '83** enjoyed a 17-year career with AT&T at the Guilford Center near Greensboro as a Software Developer/Analyst. She resigned in 2000 in order to stay home with her son and daughter. Her kids are 12 and 9 now and for the last two years, she has been employed by Guilford County Schools as a part-time tutor, and she teaches a phonics program as well as math to 4th and 5th graders. Her classes are as large as 15 kids at a time.

**Mary Mayo '88** is now a technology communications teacher at the Chesterfield Technical Center in Chesterfield, Va. She teaches employability and workplace skills to students in the Carpentry, Electronics, Child Development, Biotechnology, and Digital Imaging & Design programs. The Center has over 30 programs so she hopes to work with more programs next year. She misses teaching pure math, but she gets to help these students with the math skills that are specific to their courses.

**Mary (Beth) Neill '92** received her master's degree in secondary mathematics from the University of North Carolina in Chapel Hill in 2005. She is employed as a teacher at East Chapel Hill High School.

**Dana Redmon Watson '96** is currently in her eleventh year of teaching at East Forsyth High School. She teaches Algebra I and in the ninth grade academy. She and husband David have a daughter, Sydney (three years old). On November 7, 2006 their twin boys Weston and Mason were born.

**Cyndy Enloe Neff '99** and her husband, Jeff, announce the birth of a son: Caleb Daniel, born February 4, 2007. They live in Yadkinville, NC. Cindy taught math at West Forsyth High School (primarily Geometry and Honors Precalculus) for 5 years and is now a stay-at-home mom.

**Kate Mansi Merrill '00** received a Masters of Science in Math Education from NC State in 2003. She will finish an Education Specialist (Ed.S) post-masters degree in Educational Leadership in August 2007 from The George Washington University. She currently works as an Instructional Specialist in Perquimans County. She and her husband live in Elizabeth City, NC.

**Ashley Trent McHale '01** graduated from Texas Tech University, with an MS degree in mathematics in 2004. She stayed at TTU and taught as a lecturer in Fall 2006. In December, she married Brent McHale who has BS, MS and PhD degrees in electrical engineering from Texas Tech. They currently live in Livermore, California. Pictures of her wedding, house in California, and new puppy Sophie Germain McHale (yes, named after the mathematician) are found at the website <http://picasaweb.google.com/brent.mchale>.

**Sharon Blatt '02** received a Masters of Science degree in financial mathematics in 2004 from Worcester Polytechnic Institute in Worcester, MA. She is currently the Accounting Manager at a small bank in Taunton, MA and working on her second masters degree (M.S. Management with an Accounting Concentration, expected to finish in 2008). She is also in the process of taking the CPA exam. She is planning to marry her college sweetheart, Alan Medeiros '02, this summer.

**Leanna Briles Giles '02** teaches eighth grade mathematics and Algebra I at Turrentine Middle School in Burlington, NC. She and her husband Robert Giles live in Burlington.

**Nick Harrison '02** lives in Somerville, MA and works at Raytheon in Woburn, MA. He is currently doing test verification and will hopefully be working on actual software development in the near future.

**Katie Park '02** graduated from NC State University with a masters in mathematics education. She is getting married on June 23, 2007 in Fuquay-Varina, NC and will become Katie Park Taylor.

**Chaska Mendoza '03** graduated from George Washington University in 2005 with an MA in curriculum and instruction. She is currently teaching at Leesville Road High School in Raleigh. (continued on page 5)

**Jenny Hornback Weakland '03** married Daryl Weakland on August 3, 2006, and they live in Kannapolis, NC. They both teach at Northwest Cabarrus High School. She teaches math and he teaches science.

**Amy Flower '04** is working on an MS in Mechanical Engineering at Georgia Tech and planning to graduate in the spring of 2008 with a dual degree between Georgia Tech and ENSAM, an engineering school in Metz, France. Amy moved to France last August and will complete her studies there. She currently has an internship in Eindhoven, The Netherlands, with Philips Applied Technologies doing research and computer programming for the spring and summer.

**Josh Rowan '04** is living in Snellville GA and is a math teacher at Collins Hill High School in Suwanee Ga. He received a master's degree in math education at Georgia State University this spring. He will start a Specialist in Educational Leadership degree in the summer of 2008 at Lincoln Memorial University. This degree is the equivalent of the coursework of a doctoral degree without the dissertation. It will allow him the option of becoming a vice principal or a principal of a high/middle/elementary school. Josh and his wife, Carrie, are expecting a baby in September, and they have just purchased their first house. Josh will run his first marathon this Thanksgiving Day in Atlanta.

**Sal Fratanduono '04** works as a Consultant for Accenture, a global consulting and outsourcing firm. Until recently he was stationed out of the Washington, DC office, but he is currently working on a project in Melbourne, Australia, helping to install

a customer care and billing solution for a national telecom company. He plans to move back to the United States in early 2008.

**Diana Liberto '05** received her master's degree in 2006 from Wake Forest University in math education. She then joined the faculty at North Harford High School in Pylesville, Maryland. Next year she will be the first teacher at her school to teach AP Computer Science. In addition to teaching, she coaches the Varsity Tennis Team. She also teaches College Algebra part time at the local community college. She is working on the Masters plus 30 and deciding on a second Masters.

**Briana Yoho '05** left Wilmington, NC to move to Maryland, where her family lives. She is working at the Social Security Administration headquarters in Baltimore as a Financial Management Analyst. She is attending the University of Maryland, University College where she is pursuing a Masters of Science in Accounting and Financial Management.

**David Runkle '06** is working on a master's degree in math at UNC-Chapel Hill. He plans to finish in the spring of 2008.

**Amber Gathje '06** announces the birth of a son, Cody, on October 11, 2006.

**Ann Gregson '06** and **Carissa Berglund '06** are teaching at Northwest Cabarrus High School in Cabarrus County this year. Their classrooms are next door to each other.

## MEMORIES FROM OUR ALUMNI

I miss all the college professors that put me through mathematical torture and all my friends and classmates that got me through.....**Diana Liberto '05**

Most of my dreams came true beginning at Elon where I met Sharon. I often think how my life would have been different and so many blessings would have been missed had I not met Sharon at Bob Baxter's house in 1962. And while I didn't officially do much with my math degree during my career, the math foundation helped me every day in my work and life both in understanding and using numbers, analyzing data used in business and other endeavors, even baking (I was a head baker once) and woodworking (one of my hobbies), and solving problems. Geometry taught me a logical process for doing the latter.....**Fred Stephenson '65**

You can ask Dr. Lee & Dr. Coles about the time I burped really loud in class!!! ....**Brian Yoho '05**

Todd Lee's creation of "Epsilon Man" in analysis class.....**Nick Harrison '02**

I would never have allowed anyone else but Dr. Haworth to tell me that parallel lines would actually MEET. My favorite story is about climbing in Dr. Haworth's window to get help the night before an exam. (Note - at the time he was on the 1st floor of Duke.) Of course, filling Dr. Francis's office with balloons for his birthday late one night (compliments of a key loaned by Dr. Haworth) was one of the most fun things I did. It would have been less fun if Dr. Haworth had actually decided to call the campus security to get me in trouble as he said he considered doing. The math major picnics in the spring were always a fun event. Being able to spend time with the professors was what really developed our relationships with them. Beating Dr. Haworth at racquetball during winter semester afternoons after studying topology was a lot of fun, too! And then there was the time we locked the door, turned off the lights, and hid in the corner while Dr. Haworth stepped out for a minute. Actually, has anyone noticed a pattern here? All of the wildest events seem to involve Dr. Haworth.....**Jane Cooper Colson '80**

I still take the advice of Dr's Todd Lee and Alan Russell to heart, though I'm sure they have no idea how much of an influence they have had on my career.....**Kate Mansi Merrill '00**

## DR. JIM BEUERLE AND JAN MAYS ARE PROMOTED



**Dr. James Beuerle**, who joined the math department in 2000, has been promoted to associate professor and has received tenure. Formerly employed at Ursinus College in Collegeville, Pennsylvania, Jim grew up on Long Island and received his bachelor's, master's, and doctoral degrees from the State University of New York at Binghamton. This year, he assumed the duties of director of the high school math contest. In March, ten schools covering a five-county area participated in the contest. Jim also serves as the central North Carolina regional representative of the state Math Contest. Jim has been the advisor of Pi Mu Epsilon, the mathematical honorary society, since Elon received a charter in 2003. Jim and his wife Lisa, a senior lecturer in the math department, led a training session for Elon students on how to tutor elementary students in math. He is a Science Fellows teacher and the math department's webmaster (<http://math.elon.edu>). He is also the advisor for the math, science, and engineering learning community which is located in Virginia residence hall. Jim and Lisa live in Elon with their children, Lauren (4) and Rachel (2).

**Professor Jan Mays** has successfully completed her four-year probationary period in the position of lecturer. She first came to Elon's campus in 2002 as an adjunct instructor to teach a statistics class and then was hired full-time in the lecturer position in 2003. She previously taught at Guilford Technical Community College. A North Carolina native, she completed her bachelor's and master's degrees from the University of North Carolina at Greensboro. She is president and conference coordinator for the North Carolina Mathematics Association for Two-Year Colleges. Last fall she taught a service learning section of Math 112 (General Statistics) in which the class analyzed data for Healthy Alamance, a diabetes prevention program. As an outgrowth of her 20-year interest in quilting, she taught a General Studies seminar last winter term called "Geometry and Culture through Quilting." She gave a talk at the NCCTM conference in October titled "Activities for Modeling." She also serves as the first year core math coordinator. Jan lives with her husband, Charley, in Greensboro, and she has three grown daughters. Her daughter Charlotte is married and works in Raleigh. Emily will receive an MAT degree in French education this spring from UNC-Chapel Hill. Robin will graduate from Virginia Tech with a degree in chemical engineering, and she will work for Eastman Chemical Company in Kingsport, Tennessee.



## OTHER NEWS FROM THE FACULTY

**Lisa Beuerle** presented a talk at the NCCTM conference in October 2006 titled "Hands on Statistics Activities for Middle Grade Students." She writes a poster display each month on an interesting math history fact. She and Janice Richardson received a Community Partnership Initiative grant to help support the phone homework hotline for K-12 math students.

**Skip Allis** is chair of Academic Council this year. His greatest challenge was determining the representation of the law school on the various standing committees. His wife, Celeste, is chair of the math department and chair of the faculty senate at Rockingham Community College.

**Todd Lee** gave a talk at the MAA Southeast Sectional Conference titled "A Call from Second Life." Second Life is a 3-D virtual world on the web which has received much publicity in recent months. Todd, along with Tony Crider of the Physics Department and Megan Conklin of Computing Sciences, received a grant to establish an Elon island in Second Life. This island will be used for undergraduate research and general education. Todd also participated in a 2006 summer statistics group at NC State University involving reading/discussions of current research in statistics education. He continues to direct the mathematical and natural science branch of the Elon College Fellows program. The first group of Elon College Fellows will graduate this year. He is also on

the Academic Challenge Definition Committee. His daughter Delta (1 1/2) is now walking and learning to say "no." She loves to throw things into the trash can, including cell phones!!! Her favorite activities are Easter egg hunts and basketball since she now has a goal in the living room.

**Alan Russell** has developed a new math class, Math 117 – Mathematical View of our World, which will satisfy a general studies requirement and will be taught in the summer and fall of 2007. The course includes graph theory, fair division, and math behind the UPC codes. He has also developed another course called "Perspective on Perspective" which focuses on art and the art history of perspective drawing for winter term 2008. Last September he presented at the 4<sup>th</sup> international conference on origami, science, math and education a talk titled "Use of Triangle Centers and Folding Triangular Paper." This talk will be published in a book called *Origami*<sup>4</sup> by A.K. Peters Publishing. His daughter Michelle is in the third grade, and recently Alan taught the class to fold four leaf clovers using origami.

**Anthony Mancuso** has resigned his position as lecturer in the math department to accept a position with SAS in the Research Triangle Park.

(Continued on page 7)

**Helen Walton** serves on the Phi Beta Kappa steering committee. She did much of the work in compiling the 2006 application for an Elon Phi Beta Kappa chapter. As the application moves into the second phase, she will be busy this summer preparing a much longer application.

**Ellen Mir's** paper "Images of Relatively Locally Finite Hausdorff Spaces" was published in *Topology Proceedings* in Fall 2006. **Jim Beuerle** and **Ellen Mir** gave a presentation at the MAA Southeastern Sectional Conference titled "An approach to an Introductory Proof Class" in March. In the summer of 2006, she attended an Inquiry-Based Learning Workshop in Orange County, CA. In winter term 2008, Ellen will lead a study abroad course in the history and culture of mathematics as part of Elon's London program. She has been serving on the Graduate Council for the past two years and is the departmental MAA liaison.

**Janice Richardson** prepared the Mathematics Specialty Area Report for the National Council for the Accreditation of Teacher Education (NCATE) and the State Department of Public Instruction (DPI). The NCATE/DPI campus evaluation visit occurred on April 14-17, 2007, and the program reviewer gave the math education program a positive review. The reviewer was very impressed with the three student teachers: Olivia Bolen, Patrick Davis, and Kristin Souther. Janice and her husband, Gordon Plumblee, are traveling to Italy this summer. Janice's daughter, Bonnie, works in human resources for Deloitte in Denver, Colorado. Her son, Paul, an Elon graduate, is now attending funeral school in Atlanta. He will graduate in February, 2008 and will work at Rich and Thompson in Burlington.

**Jeff Clark** is completing his first year as the math department's chair. He presented "Refactoring and Lattice Theory" at the Southeastern Section of the Mathematics Association of America in Statesboro, GA, March 16, 2007. He also presented "Computational Group Theory and Symmetry" at the Joint Mathematics Meetings on January 5, 2007 in New Orleans. He is co-chair of the President's task force on alcohol and serves on the Student Life Committee.

**Bernice Foust** has been serving as secretary of Academic Council for the past four years. She is also program assistant to the Elon College Fellows. Her daughter Jessica has just completed her senior year in high school at Guilford College. She is a student at the Early College Program, which provides a writing intensive, fast paced experience. She will receive two years of college credit for her last two years of high school, and she plans to attend Elon next fall where she will be a Presidential Scholar.

**Ayesha Delpish** has been selected for Project NEXT (New Experiences in Teaching), a program for mathematics professors who have recently received their doctorates and are in their first or second year of teaching. She is also the faculty member in residence in the international pavilion. The pavilion houses 22 students, 11 from other countries and 11 Americans. Ayesha has planned outings for these students including trips to Washington DC, Carowinds, and Asheville. She finds the experience very rewarding since she gets to see the students in a different light. All of the students in the pavilion are exposed to the different

cultures. They can cook their own meals, and they go to brunch together on the weekends. The pavilion is a very popular housing opportunity for the international students. Ayesha says that the international students in the pavilion do not become as Americanized as those in other residents halls, since they can cook their own meals and participate in their own customs there. Ayesha and her husband, Ritson, will live in the pavilion for three years. Next year she will teach an Elon 101 class for students in the pavilion. Ritson is working on his Ph.D. degree in industrial engineering at North Carolina A&T University.

**Richard Haworth's** third grandchild, , was born to his daughter Cheryl on November 13, 2006. His other granddaughters, Katherine (6) and Caroline (4) are thrilled with the new addition to the family (see photo below). Richard is taking Spanish at Elon this year and plans a trip to Costa Rica this summer to put his new skills to use. He is also traveling with his family to San Francisco in May to visit his son, Carlisle. He also plans trips to the beach and to the Seattle area where he will drive north along the Alaskan Highway. When he returns, he will go on a motorcycle trip with his younger brother to Iowa for the National Hobo Convention. He recently announced that he will retire from Elon in the spring of 2008. More about that next year.



**Crista Coles** has worked with a physics professor, Martin Kamela, and students to make interactive science museum exhibits for children in Sri Lanka. Her husband is a native of Sri Lanka and has a cousin who is principal of a school there. The exhibits are geared to fourth through eighth grades and have been constructed by global studies classes. She, Dr. Kamela, and a group of students plan to take the exhibits to Sri Lanka during winter term 2008. She has received three internal grants to fund the project. The Community Partnership Initiative Grant through the Kernodle Service Center will provide funds for building the exhibits through a partnership with the National Science Foundation in Sri Lanka. A grant of \$5000 from the Funds for Excellence, a program which promotes the values of the liberal arts and sciences, will pay for flights and materials. She also received a grant from the Elon Center for Teaching and Learning. She sat on a panel to discuss this project at the NAFSA: Association of International Educators regional conference in Charlotte last November. She will be on sabbatical in Sri Lanka from January to July in 2008.

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## **NEED E-MAIL ADDRESSES**

Each spring we contact all Elon math alumni by e-mail to seek news for this publication. However, we have the e-mail addresses of only half of the Elon math graduates. Please send us your e-mail address so you can be a part of our network. Send it (and any news) to Helen Walton in the math department at [walton@elon.edu](mailto:walton@elon.edu). This newsletter is not possible without you. Even if you have replied previously, please write again. We continue to circulate your responses to the math faculty and our retired faculty.

## **CHECK OUT OUR WEB PAGE**

**To find out the latest information about the math department, to see our photos, and to get our email addresses and phone numbers, check our web site at <http://www.elon.edu/e-web/academics/math/>.**

This newsletter is a production of the mathematics department of Elon University.

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