ELON'S FELLOWS PROGRAMS ATTRACT SUPERIOR MATH STUDENTS

JANICE RICHARDSON BECOMES ASSOCIATE DIRECTOR OF ELON'S TEACHING FELLOWS PROGRAM

North Carolina Teaching Fellows continues to draw superior students to the math department. Established in 1987, the program provides large scholarships to some of the strongest high school students in the state in return for teaching four years in North Carolina schools. The program now includes twelve state universities and two private institutions (Elon and Meredith). Four hundred high school seniors are chosen for the program each year. At Elon, students receive annual scholarships of $6500 from the State and $6500 from Elon. In addition, Elon's Teaching Fellows have three travel experiences: an American history course on the road during winter term of the freshman year, a semester in London, and a leadership seminar in Washington, DC, during winter term of the junior year.

This year's Teaching Fellows who are majoring in mathematics include four freshmen, three sophomores, six juniors, and two seniors. **Katie Parks** '02 from Fuquay-Varina says that Elon was her top choice when applying for a Teaching Fellow scholarship. She feels that being a Teaching Fellow is a privilege because of the trips and special seminars. She says that there is added pressure on the Teaching Fellows to succeed because the professors expect more from them. Her goal is to teach math and to become board certified. Then she might consider graduate school.

Janice Richardson, associate professor of mathematics, was named the associate director of Elon's Teaching Fellows program. She works with the director, Janet Warman, in planning meetings/seminars for students and in advising. She feels that this program has increased the number of academically oriented students and has encouraged more talented students to enter math education. If you are interested in more information about this program, contact Janice at 336-278-6255 or richards@elon.edu.

TODD LEE HEADS ELON'S SCIENCE FELLOWS PROGRAM

Elon's Science Fellows focus on research. The program attracts academically talented students who are serious about studying math or science and who have outstanding high school records, including minimum SAT scores of 1200. Twenty Science Fellows are selected annually, and, for the past few years, an average of two or three have chosen the mathematics field. These mathematics students are very visible in the department, serving as officers in the math clubs and providing leadership in academics endeavors.

Science Fellows are awarded $2000 scholarships each year. Freshmen Science Fellows attend a seminar class that explores the science fields included in the Elon curriculum. They are required to do research in a discipline outside their intended major. **Erica Lucht** '04 is a biology major working on mathematics for the freshman seminar class. She praises the Science Fellows program. According to her, professors make time for Science Fellows and help them plan for the future. She says that the seminar brings together students of similar interests and helps to form lasting bonds.

As sophomores, the Fellows attend a science policy class during winter term to learn how science issues are addressed by the political process. Science Fellows receive stipends to do research with Elon science faculty members for the summer or for a semester. All Fellows do this research, write a paper about it, and present at a conference. The program provides the means for talented students to know the excitement of discovery and problem solving.

Dr. Todd Lee, assistant professor of mathematics, is the director of Elon's Science Fellows program. His excitement for research is contagious. For more information about the Science Fellows program, contact Todd at 336-278-6256 or tlee@elon.edu.

MEMORIES…MEMORIES FROM OUR MATH ALUMNI

I remember having Dr. Francis and Dr. Haworth come to observe when I was student teaching. I think that I showed Dr. Haworth where to sit and he intentionally sat somewhere else!!! It was like having Michael Jordan watch you shoot free throws…having great teachers watch me teach…Jane Cooper Colson '80

Jon Berry held an exam review at his apartment, and there was an air show nearby. He could point out the different planes to us. It was interesting to see this different side to his personality…Thomas McDow '99

Linear Algebra with Todd Lee. One of my classmates mumbled under her breath to wake me up. Then she started laughing. Dr. Lee thought we were laughing at him…Lisa Grignon '99

Walking into Bill Barbee's office (dept. chairman) in the spring of my sophomore year to tell him that I wanted to change my major from physical education to math. It really felt like the big decision that it was…Jane Copper Colson '80

I remember the day that I realized that the catalog requirements didn't say that I had to take EVERY SINGLE COURSE IN THE CATALOG!!! But apparently Dr. Francis just assumed I would take them all and I never thought to question it. I did take everything!.   Jane Cooper Colson '80

Dr. Hook's physics class. A professor from NC State University commuted to Elon from State to teach the calculus classes. No one in my family went past the eighth grade. My football scholarship and math saved my life…Charles Rayburn '62

Calculus at 8:00 in the morning was painful…Molly Sim '85

Angie Smith taking Modern Algebra with me on an independent study basis under Dr. Reichard's direction…Todd Coleman '93

Taking Theory of Equations in the back row of Professor Sox's mechanical drawing class with one other student…David Maddox '55

Geometry class with Richard Haworth. Every day was a new experience. We never knew what to expect…Julia Morris Buffington '91

We has a corner classroom in Duke where the radiators were cold all the time…Dennis Andrew '63

Spending hours sitting on the floor outside Dr. Francis' office doing my homework and sometimes using his answer book. One night he even let me take it back to my room overnight…Jane Cooper Colson '80

I still have nightmares when thinking about "King Richard" Haworth's Euclidean Geometry class. It's weird, but after all these years, I am finally starting to understand it. Freaky…Kevin Winterstein '87

Richard Haworth's geometry class where we tried to prove or disprove that the earth was flat…Thomas McDow '99

One day my classmates and I walked into Todd Lee's Modern Algebra class wearing dunce caps… Holly Weeks '99

CHAIRMAN'S CORNER
SKIP ALLIS

Since this is my first year as chair and many of you do not know me, I thought I'd take this opportunity to introduce myself. I was born and raised in upstate New York, mainly Rochester and Ithaca. I went to college in the northern part of the state at the State College at Potsdam. After the cold of northern New York, I decided I needed a warmer climate and headed to the University of South Carolina in Columbia for graduate school. After getting my Master's from USC, I went back to New York to teach for a couple of years at Mohawk Valley Community College. At that point, I felt I was ready and headed back to South Carolina to finish my Ph.D. While there, I was also fortunate enough to meet my wife, who is from South Carolina. After getting my doctorate, I was hired at Elon, and it has been a wonderful 6 years!

I would love to get to know you as well! I can be reached by phone at (336) 278-6250, by email at allisj@elon.edu or in person in Duke 209F, right next to our math-mom Bernice. I look forward to the opportunity to talk with you!

Please send us news. If you respond, we will mention you in the next newsletter. We would love to hear from you even if you have replied in previous years (Mail to Helen Walton, CB 2277, Elon College NC 27244)

Name_____Nickname_____

Year of graduation _____

Address _____

Phone: home_____work _____

Occupation_____

Spouse's Name_____

Spouse's occupation_____

E-mail Address_____Internet Home Page_____

A brief summary of your memorable moments since graduation:

Children and grandchildren: (include names, ages, and anything about them)

Hobbies and activities:

Favorite memories from Elon math classes:

COMPUTING SCIENCES CORNER
BILL HIGHTOWER LEAVING ELON

Bill Hightower, professor of computing sciences and chair of the computing sciences department, will leave Elon at the end of the semester to assume a teaching position at High Point University. He began his career at Elon in 1981 when computing sciences was part of the math department. He helped to establish the new department in the mid 1980s and to guide the department's growth. His wife Vicki joined the department in 1984, and she will continue to teach at Elon. The Hightowers live in Elon and have two grown children.

Dave Powell, currently employed with Cisco Systems, will assume the position of department chair on July 23. Dr. Powell received a Ph.D. from Rensselaer Polytechnic Institute, located in Troy, New York.

Joel Hollingsworth is finishing his Ph.D. from the College of William and Mary and will join the computing sciences department in the fall. He will fill the position that has been vacant since the death of Al Carpenter.

Beth Ellington, currently teaching in the business school, will teach full time in the computing sciences department in the fall. **Herb Schuette** has been hired as a faculty member in the business school. He has a Ph.D. from the University of Michigan and will teach computer information systems courses plus an MIS class in the MBA program.

The department is currently looking into establishing a computer information systems major. This degree would be more business oriented than the current computer science major, which requires an extensive background in mathematics. Currently there are approximately 10 students graduating in computer sciences each year and about 60 with minors in computer information systems.

MATH FACULTY PARTICIPATE IN PROJECT NExT

This year **Dr**. **Crista Coles** from the math department was chosen to participate in Project NExT (New Experiences in Teaching) sponsored by the Mathematics Association of America. Fifty young professors are chosen each year for this honor. The program allows participants access to a network of professors. **Dr. Todd Lee** from Elon was chosen in 1996. The math department is extremely proud to have two of its own chosen for this program. This year **Todd Lee** gave a talk at the regional NExT meeting which focused on undergraduate senior seminars and Excel projects.

COMAP WINNERS FROM MATH DEPARTMENT

This year two teams from Elon entered the COMAP International Mathematics Modeling Competition. The contest involves an interdisciplinary program in modeling. Fifty-eight institutions from five countries participated this year. The teams began on Friday morning, worked all weekend, and submitted answers by midnight on Monday night.

Of the 83 successful teams, 28 received "honorable mention." The math department is proud to announce that the senior team of **Brian Baker, John Marshall, and Ashley Trent** received Honorable Mention!!! This is the first year that Elon students have placed in this category. This ranking places Elon in the same league with MIT and the United States Military Academy at West Point, which also received honorable mention. Elon's junior team of **Emily Hudson, Ryan Huff, and Shaun Lynnott** placed in the "successful" category. **Todd Lee** and **Crista Col**es were their faculty advisors from the math department.

DAVID MADDOX WORKED WITH THE EARLIEST COMPUTERS

David Mattox '55 could write a book on the development of early computers. After a stint of teaching and serving in the military, he moved to Huntsville, Alabama, in the early 1960s to work at the Marshall Space Flight Center in the early days of the space program. There he worked with Dr. Howard Enestrom, co-inventor of the first commercially available scientific computer, the UNIVAC 1101. He then relocated in the mid 1960s to Blue Bell, Pennsylvania, to work with Dr. J. Presper Eckert, co-inventor of the ENIAC, BINAC, and UNIVAC I computers. In the early 1970s he worked for American Equity Press and was responsible for the development of the first computer typesetting system for financial printing. From 1974 until his retirement in 1990, he worked for E-Systems, a defense electronics company that was eventually acquired by Raytheon. He served as division vice president of command control and intelligence and was responsible for developing and fielding the first fail-safe, fail-soft computer system for the Federal Aviation Administration. He is now retired and living in DeQueen, Arkansas.

THREE NEW FACES JOIN MATH FACULTY

Jim and Lisa Beuerle joined the math department last fall. They have been welcome additions to the department and have enjoyed settling into their new home in the town of Elon. **Dr. James Beuerle**, formerly at Ursinus College in Collegeville, Pennsylvania, grew up on Long Island and received his bachelor's, master's, and doctoral degrees from the State University of New York at Binghamton, and he was inducted into Phi Theta Kappa Honor Society. He says that he has enjoyed his move to the south where things move more slowly and people are friendlier. His hobbies include woodworking, golf, and computers. In his spare time he is learning LaTeX, a typesetting computer language. He is continuing to work on his research, which focuses on abstract algebra. At Elon he is the advisor for the mathematical society Kappa Mu Epsilon. He is working with senior math majors on their research and is the LaTeX advisor for senior seminar.

Lisa Beuerle has bachelor's, master's and master's in teaching degrees from State University of New York at Binghamton. While there she accumulated a grade point average of 3.9 and was inducted into Phi Beta Kappa Honor Society. She was previously employed at Montgomery County Community College in Pennsylvania. She enjoys running, kickboxing, and working out in a fitness center. Her hobbies include sewing and gardening. Next year she will be working with the math education students and teaching some of the math education classes. Lisa has a twin sister and has been married to Jim for three years.

Dr. Crista Coles earned her bachelor of science degree in 1993 from Allegheny College, where she received the outstanding junior and senior awards in mathematics. At the University of Cincinnati, she earned her master's and doctoral degrees with a dissertation in numerical analysis. Her teaching experience includes classes at the University of Cincinnati and Wittenberg University. She has immediately become involved in many departmental projects. She is encouraging students to take the actuarial exam and has held regular seminars to help them prepare. She is working with two students on their research in differential equations and group theory. She and Todd Lee were the advisors to the COMAP teams from Elon (see article on page 4). Crista hails from Pittsburgh and is now living in Durham. She is an avid soccer player and currently plays on a city league. She played semi-professional soccer in Cincinnati. At Elon, she serves as faculty advisor for Elon Outdoors trips. She is also the advisor for "One Homeless Night" when students bring clothes and food for the homeless and spend the night outside in a cardboard box to experience first hand the plight of the homeless. She also represents the math department on the common reading committee, which selects the book to be read by incoming freshmen. She is currently doing research in numerical analysis as applied to partial differential equations. Recently she submitted an article about her research to *Computer and Mathematics* journal, and the article was accepted for publication. She hopes to have another article ready for publication this year.

WEDDINGS, FAMILIES, AND BABIES

Last July 1 **Janice Richardson** married long time friend Gordon Plumblee at St. Marks Church in Elon. They honeymooned in Nova Scotia, Newfoundland, and Prince Edward Island. Gordon is a biology teacher at Western High School near Elon. Janice has sold her house and has moved into Gordon's. If you would like to send your congratulations, her email address is richards@elon.edu. Janice's daughter Bonnie is a junior at UNC-CH, and her son is a freshman at Elon.

Richard Haworth is a grandfather!!! Katherine Carlisle Wyrick was born to his daughter Cheryl on April 23. The new baby weighed six pounds, 13 ounces. Cheryl and her husband David are both working on their doctoral degrees at UNC-G, expecting to finish in the spring of 2002. Richard's son Carlisle is attending graduate school at Virginia Polytechnic Institute. Richard Haworth married Judy Self last June, and they honeymooned in Switzerland.

Helen Walton's son Drew and wife Christina are expecting their second son in July. They live in California where Drew is employed as an engineer with Hewlett Packard.

Vicki and Bill Hightower's son Kenneth is getting married this summer. He is in graduate school at UNC-CH (studying economics) and works part time for SAS Institute in RTP. Karl, a 1997 graduate of UNC, currently lives in Dallas where he is employed by CapRock Inc. Karl and Mary Ann Lechleiter were married March 25, 2000.

David Nawrocki, who left Elon in 1999, writes that his wife Ethel is expecting another baby (a girl) on July 6 to join the two Nawrocki boys. David writes that "with three kids under the age of five, things are going to be getting pretty busy (call us crazy)." They are busy painting and getting things ready for the new baby. David is teaching at his alma mater Albright College and can be reached at davidn@alb.edu.

Bill Barbee enjoys having all his six grandchildren, ages ranging from one to twelve, living in North Carolina.

DEPARTMENT HAPPENINGS

Dr. Alan Russell gave two talks at the state conference of the North Carolina Council of Teachers of Mathematics (NCCTM) last fall. He also gave a talk at the NCCTM central regional conference held at Elon in March. His talk focused on the use of Geometer's Sketchpad. Dr. Russell was recently named the core mathematics coordinator by Elon's General Studies coordinator. He will help coordinate the focus of the freshman experience in mathematics, English, global studies and wellness. During winter term, Dr. Russell taught a special section of college algebra called "Predicting the Millennium." This summer he will offer Math 110 (Nature of Mathematics) as a Web-based course.

Dr. Richard Haworth is continuing in the position of conventions coordinator for the NCCTM. He also successfully organized the 23rd High School Math Contest, which is held each spring at Elon for area high school mathematics students. He is on the Rhodes Scholar committee, which seeks outstanding students to apply for this scholarship. He is on an Honors Program Advisory Committee and serves on the Educational Program Committee for the Southern Association of Colleges and Schools (SACS) at Elon.

Dr. Jeff Clark has been on sabbatical this spring semester working with Jon Berry in the computing sciences department on extending the LINK software package. He presented "The LINK graph software package: a Status Report" at the annual meeting of the southeastern section of the Mathematical Association of America in Montgomery, Alabama, in March 2001. Also, in March he gave a talk entitled "An Introduction to Demography" at North Carolina A & T University. In January he attended an American Mathematics Society/ MAA joint meeting in New Orleans and gave a presentation called "Exploring Finite Topologies."

Helen Walton serves on the Phi Beta Kappa Steering Committee which is spearheading Elon's efforts to establish a chapter on campus. Last summer she successfully nominated Elon for a state horticultural award. She serves on the Board of Trustees of Preservation North Carolina, a statewide organization which focuses on preserving North Carolina's historic architecture. She also serves as chairman of the Burlington Historic Preservation Commission and has been appointed by the Alamance County Commissioners to serve on Vision 2020, a long-range planning committee for the county.

Dr. Todd Lee is the director of Elon's Science Fellows program (see page 1). He will also be the lead instructor in mathematics at Governor's School West for the coming summer. He and Paula Young from Salem College have a textbook series contract with Addison-Wesley for a finite math/brief calculus textbook and an extended two-semester text of brief calculus. These texts will use Excel as the primary technology tool. The publishing date is January 2003 for the first of four books. Paula Young and Todd Lee gave a one-hour session entitled "Using Excel Projects in Finite Math and Brief Calculus" at the International Conference for Technology in College Mathematics in Atlanta last November. During the past year at Elon he has served on the Academic Council, the Dean Selection committee, the SACS Wholeness of Community committee, the President's Task Force on University Designation, the Senior Showcase selection committee, and as the Goldwater Scholarship representative. This spring he went with a group of students to the southeast regional MAA conference in Montgomery Alabama, and he also attended the national joint conference of the AMS and MAA in New Orleans.

Janice Richardson has been elected president of the central region of the NCCTM. She will serve for the next two years. She has given two campus presentations on the results of her research from last year's sabbatical regarding the Third International Mathematics and Science Study. She has been appointed associate director of the Teaching Fellows program (see page 1).

Bill Barbee is the chairman of the sportsmanship and ethical conduct subcommittee of the NCAA Division 1 Committee on Athletics Certification.

Skip Allis presented at the NCCTM conference last fall and attended the ICTM conference in Atlanta and a department chair's conference in San Diego. He is still getting used to being the chair of the department.

Rosalind Reichard, former dean of math and sciences and former chair of the math department, is now the vice president of academic affairs at Meredith College. She writes, "my work at Meredith is very time-consuming and rewarding. Professionally, I am further removed from mathematics teaching and research. But, I still am teaching one math course per year -- this year college algebra. The Math Department here is excellent and so I do continue to have good colleagues."

STUDENT HAPPENINGS

Ashley Trent '01 worked at North Carolina Governor's School last summer as a teaching assistant. She also worked with Dr. Todd Lee on his research in complex analysis. Ashley is going to graduate school at Texas Tech University with a fully paid teaching assistantship and with the intent of pursuing a Ph.D. in mathematics. She is a Science Fellow.

Jeff Gariepy '02 is a computer science/mathematics double major and a Science Fellow. Last summer he received a stipend to participate in SURE (Student Undergraduate Research Experience) working with Bill Hightower on genetic algorithms for solving linear programming problems. **Erin Krupa** received a stipend to participate in SURE this summer.

Ashley Trent, Shaun Lynott, Katie Iwancio, and Brian Baker attended the southeastern regional MAA conference in Montgomery, Alabama. Brian Baker presented a talk on "Applying Linear Programming to Linear Assignment Problems." Ashley Trent's talk was "Categorizing Parabolas in Hyperbolic Geometry." Both talks were well received, and Ashley has been invited to publish her work in an undergraduate journal.

Four students, **Brian Baker, Ashley Trent, Anne Yancey, and Erin Krupa** made presentations at Elon's Student Undergraduate Research Forum. Brian and Ashley repeated their presentations given at the regional MAA meeting listed above. Ann spoke on isotaxi geometry. Erin talked about gender inequity in secondary math education. Ashley will present at Senior Showcase under the direction of Richard Haworth.

Julie Pelter '02 will travel to Izhevsk, Russia, this summer on a mission trip with a group called Pioneers. College students from across the United States will participate. She is Elon's Outstanding Math Education Student for 2001 and will compete for the NCCTM student award. She has also been appointed the student representative on the NCCTM Board.

Sharon Blatt '02 is the new president of the Elon Math Club and Kappa Mu Epsilon, the mathematics honor society.

The math department's Service Award for 2001 was presented **to Katie Parks '02. Jessica Pollard '01 and Rose Cordero '01** were presented the Mathematics Student Academic Excellence Award.

Rose Cordero '01 has been accepted in law school at UNC-CH, Wake Forest University, and the College of William and Mary, among others. She will make a decision soon.

NEWS FROM THE ALUMNI

- **Amanda Sherman '98** graduated from Wake Forest University with a master's degree in mathematics. She is working with a law firm in Winston-Salem and thinking about attending law school.
- **Holly Weeks '99 and Lisa Grignon '99** are attending graduate school at UNC-CH. **Holly and Thomas McDow '99** were married in February. Thomas sells books for Southwestern.
- **Cindy Enloe '99** is attending graduate school at Wake Forest University, working on a master's degree in mathematics. She is getting married this spring.
- **Lyndsey Jessup '99** is also at Wake Forest this year.
- **Mike Stanley '86** is working as a business systems analyst in Delaware.
- **Tom Keenan '90** is a development manager and lives in Wake Forest, NC.
- **Joseph Trent '74** is the owner of 3WO Technologies in Elon.
- **Julia Morris Buffington '91** is the office manager for her family business. She lives in Burlington.
- **Molly Sim '85** is a senior manger for WorldCom, Inc. in Alexandria, Virginia.
- **Olga Griswold '80** is an accountant with a CPA firm and lives in Elon.
- **Charles Rayburn '62** is a math teacher and coach at Reidsville High School. His football team has been the state co-champion, and his wrestling team was the state 3A champion for two years.
- **Matt Wright '92** works for Partner's Insurance.
- **Todd Coleman '93** is a commercial lines insurance underwriter. He lives in Burlington.
- **Kevin Winterstein '87** is a self-employed computer consultant and lives in Burlington.