Andrews University
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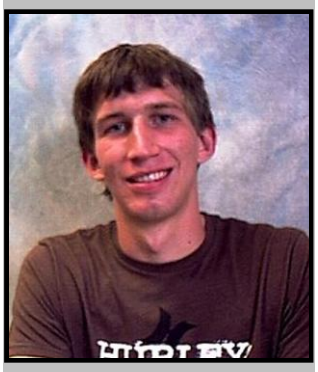
K. M. Johnson-McWilliams, Editor

MATH@ANDREWS

Department of Mathematics, Andrews University, Berrien Springs, MI 49104-0350 USA



Senior Finance/Math Major Elected AUSA President

Congratulations to **Andrew Moll** (Finance/Accounting; Mathematical Studies) for winning the election to become the AUSA president for the 2011-2012 school year. He may become a CPA and continue his education with either an MBA or a Master's of Finance. He says that he is still in the process of trying to figure out what God wants him to do, so he says that his plans could easily change.

Luis Garibay Spent Summer Working with Raman Spectroscopy

Junior mathematics and chemistry major **Luis Garibay** spent ten weeks of his summer at Northwestern University in Evanston, IL, working for Professor Richard P. Van Duyne, faculty member of the Chemistry Department and a major contributor in the area of surface-enhanced Raman spectroscopy. His research consisted of collecting evidence that supports the premise that the use of a variation of Raman spectroscopy known as Tip-enhanced Raman spectroscopy can enable chemists to detect a single molecule. This analytical technique, used in chemistry to identify molecules, differs from conventional Raman in that it utilizes a noble metal tip (gold, silver, or copper) to excite a plasmon on the surface of the analyte, which leads to an enhanced Raman signal.

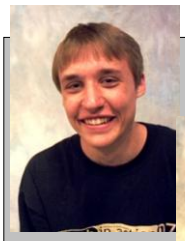
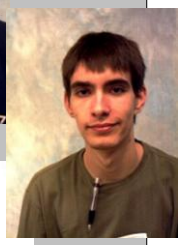
Luis used a frequency domain approach to accomplish his research. The idea is to collect Raman spectra of a low-concentration solution of two isotopologues of the same molecule over a period of time and make a histogram of occurrences of the three possible cases (either A or B or both). He then compared the results to the theoretical value of the probability of detecting one species or the other. This probability depends on both the Poisson and binomial distributions. The Van Duyne Group previously employed this method in 2007 to show that single molecule surface-enhanced Raman spectroscopy is also possible.

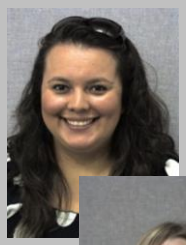
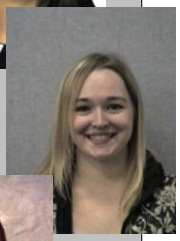
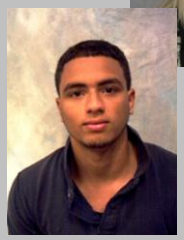
Even though this research is not exactly an area he intends to pursue, Luis was able to use mathematics and was reassured that he would enjoy going to graduate school in chemistry, which is his plan after he graduates in May 2013.

Basil Williams Finds Creative Use for Mathematics

Basil Williams (2006) currently is working as an educational assistant for a school division in Manitoba, going from school to school to work with all levels of students. To keep somewhat in touch with math, he is a DJ on a local radio station, hosting a show called *Acoustical Propagations*, a name that he created while taking Solid State. In fact, all of the phrases he uses are in some way related to math or physics even though the actual music is not (except for one song called "Q.E.D.") Interspersing science and math in his program has sparked interest in listeners, and he has had discussions with some of his students about symmetry in nature and the existence of gravitons. "Music pulls people together, just as gravity pulls and holds us together on Earth. So, there are a lot of parallels; hence, the framework is related to math or physics in some way. When I make my program, I just fill that framework with music."

2011 Graduates

Tyler Bodi (Political Science/Mathematical Studies; PME, Honors) is a student missionary in Ukraine, teaching ESL classes.

Kendall Hopkins (Computer Science/Math Studies; PME) lives and works in Bloomington, IN, while his wife does her graduate studies at IU.

Jean Lemeau (Electrical and Computer Engineering/ Mathematical Studies; Honors).

Erin McLean (English/ Mathematics; PME, Honors) works at a café in Chicago and writes in her spare time.

Gabriella Melgar (Mathematics Education/Spanish with Secondary Certification) is employed full time at Griggs International Academy as an enrollment coordinator, working with homeschooling parents and K-12 students around the world.

Katie Parker (Mechanical Engineering/Mathematical Studies/Chemistry) is employed full time in the quality department of Specialty Steel Treating, Inc., while working on her Masters in Chemical Engineering part time at Wayne State University.

Daniel Ruiz (Computer Science/Mathematical Studies, PME) is pursuing his master's in computer science at the University of Illinois, Chicago.

Eric Scott (Computer Science/ Mathematics; PME, Honors) is a first-year PhD student in Computer Science at George Mason University, working under Kenneth De Jong, who is something of a patriarch in Evolutionary Computation. Eric is doing Java programming for a group in the Computational Social Science department that uses agent-based simulations to study East African society. He says that, whereas he understands the need for computer models to study complex, highly nonlinear systems, he remains a bit skeptical that models that often have the 40 or 50 parameters common in agent-based modeling can tell scientists much of anything. However, the project's ultimate goal is using Evolutionary Computation to parameterize models against real-world data. Working with social scientists has been interesting as he learns to communicate across disciplinary boundaries.

On the side Eric will be implementing a neural network evolution model called NEAT into the library his lab maintains. It's a new algorithm that's become quite popular in applications in the last couple years, which adjusts the weights of the network (the model parameters) and adds nodes (new terms/function compositions) in a controlled fashion.

For any undergraduate considering going to grad school for mathematics, Eric recommends *Mathematics 1001* by Richard Elwes, a coffee-table type book that somewhat ostentatiously claims to summarize "absolutely everything that matters in mathematics in 1001 bite-sized explanations." Its two-paragraph entries have told him more about such topics as Hilbert's program, topology, and algebraic geometry than he picked up during his undergraduate education.

On a personal note, Eric says, "I'm getting used to having my own spacious apartment (with a *dishwasher*), doing my own grocery shopping, and riding the bus every day (I've sold my car). I also have two new kittens that I'm trying to teach manners (Our Prime Directive is "Do Not Destroy," but they haven't quite gotten it down pat yet)."

Current Student Updates

Senior Math Ed major **John Musselman** married Ellen Poirier this past summer. Ellen now works for Adventist Frontier Missions, doing the magazine layout, and John plans to find a job teaching mathematics and chemistry after he graduates.

Reneesha Thompson (Math Ed, Spanish minor), is studying in Argentina.

Last year three of our current majors went as student missionaries. For the seventh Eigen talk, these three—**Chris Greenley** (BS Physics/Math Studies), **Mateja Plantek** (Math Ed), and **Sinclair Johnston** (BS Math)—shared with their fellow students stories not only of their experiences but also of how their math education played a role in their work during the year. **Chris** served as tech support for Malamulo Hospital in Malawi, Africa, as well as teaching computer literacy courses to the staff. **Mateja** taught math, physics, and chemistry in Majuro, Marshall Islands, and **Sinclair** also taught math in the Marshall Islands.

Alumni! Please send your updates to math@andrews.edu and join us on our new *Facebook* page. Friend us at Andrews Department of Mathematics.

Pi Mu Epsilon

On April 7, 2011, eight members were inducted into the Michigan Gamma Chapter of Pi Mu Epsilon in a departmental ceremony. The new inductees are **Ebenezer Akyiano, Tyler Bodi, Amanda Corea, Cecilia Dias, Kenneth Fluence, Luis Garibay, Andrew Moll**, and **John Musselman.**

President **Theron Calkins** presided over the meeting, assisted by Vice President **Andrew Hoff** and Secretary-Treasurer **Sandra Prieto**.

The club voted in its new 2011-2012 officers: **Theron Calkins**, president; **Luis Garibay**, vice president, and **Cicilia Dias**, secretary-treasurer.

Left to right: PME officers: Sandra Prieto, Theron Calkins, Andrew Hoff; inductees: Luis Garibay, John Musselman, Tyler Bodi, Cecilia Dias, Andrew Moll, Amanda Corea, Kenneth Fluence, and Ebenezer Akyiano.

Drs. Oh and Kang Become US Citizens and Members of Sigma Xi

On February 17, 2011, five AU professors were inducted into full membership in Sigma Xi, the Scientific Research Society, two being mathematics professors Dr. Joon Hyuk Kang and Dr. Yun Myung Oh.

Dr. Kang, Professor of Mathematics, (PhD in Mathematics, 1998, from Michigan State University) specializes in the areas of Nonlinear Partial Differential Equations, Probability Theory, and Modeling and has published 17 papers, most as the first author, in peer-reviewed mathematics research journals, recently submitting an 18th paper. He has also coauthored three papers with three Andrews University undergraduates and serves as the faculty advisor for Pi Mu Epsilon, the national mathematics honor society. In addition, he serves on the editorial board of two mathematics research journals.

Dr. Yun Myung Oh, Associate Professor of Mathematics, (PhD in Mathematics, 2000, from Michigan State University) specializes in Differential Geometry. Dr. Oh has published 10 papers in peer-reviewed mathematics research journals, with two more papers in preparation.

Dr. Oh and her husband, Dr. Kang, became US citizens this year.

New Faces in the Department

AbdiasVence, Assistant Professor of Mathematics Instruction. teaches high school students at the RESA Math and Science Center. He graduated from Southern Missionary College (BA in Mathematics, 1973), then after teaching for several years earned his MS in Information and Computer Science from Georgia Tech. He worked at NCR Corp for a few years before serving six years at Antillian College, helping to implement and instruct in their new A.S. and B.S. Computer Science program. Upon returning to the States, he worked for several years in the private sector before teaching at Bass Memorial and Wisconsin Academies. Married to Suzi (Kabanuk) Vence, R.N., since 1974 he has two children: Nicolas (SAU, BS Physics and math), who just defended his doctoral thesis in computational physics, and Rachel, who has a BA in psychology from SAU and an M.S. in Marriage and Family Therapy from LLU.

Teaching calculus for RESA Math is **Amanda Umlauf** (BA, Psychology, 2006; MAT Mathematics, 2011), who also teaches two classes of MATH 091-092 for the Department. Last year Mandy taught students at Ouray High School in Ouray, CO. Her interests include pets, plants, crafts, camping, friends, family, books, movies, God, Christmas, stories, students, and teaching.

Karen Johnson-McWilliams is the new full-time administrative assistant for the Department. An alumna of Walla Walla College (BA English, 1979) and AU (MA Literature, 1980), she has been an adjunct professor of English at AU, Purdue, and, for the last eight years, Lake Michigan College, where currently she is teaching one night class a semester. She has two children, both of whom attended Andrews: Kelly (BS & MS, Biology) and Timothy (BS, Marketing). Her goal is to develop a mentoring program whereby math alumni can help current majors determine which job/area of study interests them, so she needs alumni to share how they are currently utilizing their math degrees. To help, write karenj@andrews.edu.

Prince Returns

Born in Delaware, **Marian Prince**, who teaches 091-092 and Statistics, earned her BS at the University of Michigan in Mathematics and Physics. For 25 years she taught middle and high school math, science, and technology subjects in several districts across Michigan, mostly in the Benton Harbor area. After retiring in 2010, she completed her PhD in Curriculum and Instruction at Andrews and formed a non-profit organization, Charitable Calculators, which receives donated graphing calculators and distributes them to qualifying schools around the world. She spent her Thanksgiving holiday delivering calculators to Jamaica and will go to Albania before Christmas. She has five children and four grandchildren and loves to sing and play flute in the worship team at her church.

Research and professional activities

Shandelle Henson was one of four professors to receive the Siegfried H. Horn Excellence in Research and Creative scholarship Award at the 2011 Andrews Awards Presentation.

Left to right: Shandelle Henson, Karen Allen, and Larry Burton. ***Not pictured***: Richard Davidson

Publications

Chase, B., & **Kang, J. H**. (2009). Positive solutions to an elliptic biological model, *Global Journal of Pure and Applied Mathematics*, 5(2), 101-108.

Henson, S. M., Weldon, L. M., Hayward, J. L., Greene, D. J., Megna, L. C., & Serem, M. C.. (2011). Coping behavior as an adaptation to stress: Post-disturbance preening in colonial seabirds. *Journal of Biological Dynamics*, DOI 10.1080/17513758.2011.605913

Henson, S. M., Cushing, J. M., & Hayward , J. L. (2011). Socially-induced ovulation synchrony and its effect on seabird population dynamics. *Journal of Biological Dynamics*, 5:495-516.

Presentations

Shandelle M. Henson--Colloquium, Departments of Mathematics and Biology, "Chaotic Dynamics and Lattice Effects in Experimental Insect Populations," University of Dayton, Dayton, OH, September 22, 2011.

Shandelle M. Henson--7th International Congress on Industrial and Applied Mathematics--ICIAM 2011, Minisymposium on "Modeling Aspects of Endocrine Regulation in the Female Reproductive System," Vancouver, BC, July 18, 2011.

Shandelle M. Henson--Joint Mathematics Meetings, SIAM Minisymposium on "Applications of Difference and Differential Equations in Ecology and Epidemiology," New Orleans, LA, January 6, 2011.

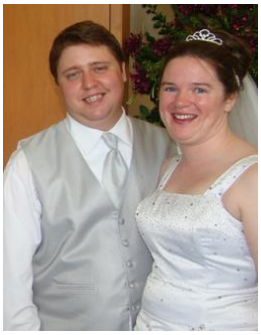
Shandelle M. Henson--Plenary speaker, Third Annual Celebration of Research, "The Mathematics of Animal Behavior," Andrews University, Berrien Springs, MI, November 10, 2011.

Lynelle Weldon-- Third Annual Celebration of Research, "Analysis of Factors That Affect the Hatching Success of Gull Eggs," Andrews University, Berrien Springs, MI, November 10, 2011.

Joon Kang, Kami Lizarrago, Benjamin Chase, & Brian Ibenez)--Poster, Third Annual Celebration of Research, "Coexistence State in Species of Animals Residing in the Same Environment," Andrews University, Berrien Springs, MI, November 10, 2011.

Yun Mung Oh--Poster, Third Annual Celebration of Research, "Lagrangian Submanifold and Riemannian Submersion," Andrews University, Berrien Springs, MI, November 10, 2011.

Alumni notes



Laura and Nathan Carroll, June 5, 2011

Please send your updates to math@andrews.edu.

Danielle Burton (2008) spent 2009-2010 teaching English and Western Culture at a small private university in an agricultural province in China. Currently she is pursuing her MS in Mathematics and Science at Andrews, concentrating on math modeling applications to biology. She is glad to be back in the land of Taco Bell but misses baozi with a passion.

Kiana Binford (2009) is a missionary working in a remote part of the island of Palawan in the Philippines with Adventist Frontier Missions.

Laura (Nelsen) Carroll (2008) was married to Nathan Carroll on June 5, 2011, and currently enjoys her work at the Office of Institutional Assessment at Andrews University. Laura previously taught at Benton Harbor High School in MI and Adventist Christian Academy in NC and was an after-school coordinator for SER of Westchester INC. in NY.

Darren Heslop (2010) is a full-time Web developer and designer/photographer for Andrews University's Integrated Marketing and Communication department.

Andrew Hoff (2011) was accepted into the PhD program in Material Science at CalTech.

Brian Ibanez (2009) is still at Georgetown University in Washington, DC, working on a PhD in economics. He has passed all his comprehensive exams and has only five courses left to take. And he is engaged to Allison Nowack!

Sereres Johnston (2009) passed the qualifying exams at the end of January for her PhD program in Physics--one full day of quantum mechanics and another of classical mechanics. To relax after the tests, she went to the pony round-up on Assateague Island off the Virginia coast.

Emmanuel Scott (2009) is currently working as a Pre-Health Content Development writer for Kaplan Test Prep in New York City while he is applying to medical schools in the Midwest and New England.

Stefan Smith (2010) reports that life is going well for him in Bermuda where he is enjoying his job at Ariel Reinsurance and planning to get married to Aashiqa Mehta on March 18, 2012, in Toronto. He writes that he is glad that Bermuda has escaped having any major hurricanes this year.

Focus on alumni: Philippe LaGuerre

Philippe, a 2009 BSE: Engineering/Mathematical Studies major with minors in music and Spanish, granted Math@Andrews an interview to share about his life in law school, his passion for Christ, and his plans for the future.

When did you become interested in and when did you decide that you wanted to major in mathematics?
My dream was to take AP Calculus. I had no idea what calculus was, but whenever someone wanted to talk about the difficulty of math, calculus was at the top of the spectrum. As a high school sophomore, I had to take Algebra I and did poorly on my first couple of tests. Concerned, my teacher told me that, unless I started to do better, I would have to drop down to a lower class. With my back against a wall and my dream ahead of me, I had no other choice but to buckle down. I made a complete 180, aced the class, and subsequently received the student of the month award. Ever since then, math has been my thing.

Why did you choose to come to Andrews?
I knew I wanted to major in electrical engineering because it applied mathematical concepts. I planned on applying to MIT, Harvard, and some other top schools in my area, but my parents helped me to realize that to go to an Adventist institution would be more economical. I later discovered that only Walla Walla and Andrews had engineering programs, and since I had no intention of going to Washington state, I packed my bags and headed for my father's alma mater, Andrews. I had been on the campus once as a child, but besides that I had never visited the campus.

What math classes were the most interesting?
My favorite classes were Intro to Linear Algebra and Probability Theory/Statistics App. I loved these classes because they were so practical to my engineering studies and life in general. Linear algebra is used in computer theory and for solving systems of linear equations. And I use probability and statistics every day to turn sets of data into dynamic information, useful in helping me make decisions.

What other classes at AU were favorites?
I loved Physics for Scientists and Engineers because I got to see many mathematical concepts come to life through their application in classical mechanics, Einstein's theories of relativity, and quantum mechanics. Watching the derivations unfold was amazing. From this class I realized that no subject is an island, that all my classes intersected some way.

Why did you decide to pursue a law degree?
To earn a doctorate has always been a goal of mine. Freshman year, a group of students and I completed a successful end-of-the-year project in my Introduction to Engineering class. My group tried to patent the project, but because of financial constraints, we were unable to move forward. That was the first time I was exposed to patents, but that experience during my freshman year awakened a desire to go into patent law. By junior year, I started studying for the Law School Admissions Test (LSAT). I also thought about getting a PhD in electrical engineering. However, I felt that, by doing so, I would limit my options to becoming either a professor or a researcher, and since I favor a broader base of learning, I decided on law.

How did your math major help prepare you for law school?
Law school is different from mathematics in that it is process oriented while math is more solution based. Acing a law school exam doesn't have to do with my final answer but what legal reasoning I used to arrive at that answer. Mathematical derivations and proofs gave me invaluable training for this step-by-step analysis. Proofs were admittedly not the most exciting part of my math experience, but they gave me a solid foundation and awakened the instinct in me always to ask why and how. The most rewarding moment is always writing "QED" on the bottom of a proof.

How did you decide on the Benjamin N. Cardozo School of Law?
When applying to law schools, my method was to sow as much seed as possible. Growing up, I had heard the horror stories of graduate school hopefuls getting rejected after applying to only a handful of schools or not taking their admissions tests soon enough. To avoid having to spend the next year finding some alternative plan, I took my LSAT early and applied to about fifty law schools all over the country. I chose Cardozo because it awarded me the Nathaniel Gates Merit Scholarship, which covers my tuition.

What awards have you received?
This summer I was awarded the International Corporate and Intellectual Property Law Fellowship Stipend that helped me go to Rio de Janeiro, Brazil, for an internship at an intellectual property firm based in the center of town.

What do you see yourself doing twenty years from now?
I believe that my legal career has taken a turn for the better. I switched my specialty from intellectual property law to constitutional law and hope to get some practice in First Amendment litigation in the near future. However, since I am convinced that we are living in the last days, I've further readjusted my goals after travelling to many parts of the world and consistently noticing that people need medical care. I also looked at the ministry of Christ on earth and noticed that He tended not only to people's spiritual needs, but to their physical needs as well. Convicted that I should do that too, I have decided to go to medical school after completing my studies at Cardozo and do a residency in general surgery. My plan is to start studying for the MCAT this December and sit for the test in February. My hope is to get into Loma Linda because I love Adventist education and want eventually to move to California to start a healthcare & wilderness survival retreat.

Andrews University
Department of Mathematics

Programs

BS in Mathematics
BS in Mathematics Education
Mathematical Studies Major
Mathematics Minor
Mathematics Education Minor
Minor in Mathematics of Economics and Finance
Behavioral Neuroscience Mathematics Track
Masters in Mathematics and Science (Interdisciplinary)

PME Michigan Gamma Chapter

*Theron Calkins, President
*Luis Garibay, Vice President
*Cecilia Dias, Sec-Treas
*Prof. Joon Hyuk Kang, Advisor

Eigen* Math and Physics Club

*Emily Adams, Math President
*Sam Snelling, Physics President
*Chris Greenley, Secretary
*Michael McMearty, Secretary
*Mateja Plantak, Secretary

Mission Statement

Through teaching, research, and service, the Department of Mathematics seeks to provide leadership in the mathematical sciences by:

*Preparing students with the mathematical understanding, problem-solving skills, and dispositions that enable them to excel in their chosen careers;

*Increasing mathematical and scientific knowledge through publication and presentation;

*Supporting the broader mathematics education community and mentoring others for generous service through a committed Christian life.

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In Memorium: Edward John Specht (1915-2011)

Professor of Mathematics, Emeritus, at both Andrews University and IU South Bend, Edward John Specht (b. July 29, 1915) died near Spencer, IN, on November 9, 2011, at the age of 96.
Dr. Specht married Mary Josephine Michel (d. March 26, 2008) on December 25, 1938. They had two children: Lahna, presently living in North Carolina, and Frederick, of Bloomington, Indiana; one grandson, Rob Richardson, residing in North Carolina; and two great-grandchildren.
He attended Campion Academy and received his BS from Walla Walla College in 1939, then studied at the University of Colorado, receiving an MS in 1941. He did advanced study at Washington University (St. Louis) from 1941-44, and at Brown University in the summer of 1945 before receiving his PhD from the University of Minnesota in 1949.

Dr. Specht was Instructor in Mathematics at both Washington University and the University of Minnesota, and was Professor and Chair of Mathematics at Andrews University from 1947 to 1972, then Professor of Mathematics at Indiana University South Bend from 1972 to 1986.

Specht's publications include his PhD thesis on conformal mapping and four publications mainly in potential theory with Harold T. Jones, for whom he served informally as thesis advisor. In his later years he wrote a treatise on Euclidean Geometry with Jones.

A member since 1949 of the Mathematical Association of America, a 50-year life member and Fellow of the American Association for the Advancement of Science (AAAS), and a member of the American Mathematical Society, of Pi Mu Epsilon, and of the Society of Sigma Xi, Dr. Specht was a formative person in the development of science education and research on the Andrews University campus as evidenced by the fact that more than twenty of Edward Specht's former students at Andrews University have pursued doctorates in math. In 1984 Andrews conferred upon him the honorary degree of DSc.

Those of us who knew him and studied under him remember him as a person of wide-ranging interests in mathematics and science, and as one who lived a life filled with kindness and integrity. Truly he was a giant.

--Don Rhoads

News from Former Colleagues

Rene´ Friend, the office administrator until May 2011, delivered a baby boy on November 1. She; her husband, Ryan Hablitzel; and her older two children now live in Castle Valley, UT, where her husband is the district pastor of three churches. The family enjoys many outdoor activities in the red desert such as hiking, looking for dinosaur bones and petroglyphs, and visiting Arches National Park. While still pregnant, Rene´, along with her family, hiked the advanced hiking trail to Delicate Arch twice.

Gina Creek, former teacher in the RESA Math and Science Center and teacher of MATH 091-092 for the Department, is now living in Florida where she is slowly getting used to running in the heat and humidity. Currently working for Adventist Health System (AHS) as a Change Management Analyst and dealing with the people side of change, she explains her job this way: "Whenever one of our hospitals undergoes an upgrade to its hardware or software, I work with the leadership to be sure that they are ready to manage the resistance and other problems associated with the change process. Basically, I get to use my Organizational Development training, which is very exciting to me." She misses the classroom but so far loves her new work. Her husband, Greg, also likes his work doing music and being on the youth leadership team. They both miss Michigan, especially fall and apples.

Friend us on *Facebook* at Andrews University Department of Mathematics

Andrews University

07 December 2011

Dear Friends,

In the Fall of 1986, I was a "visiting undergraduate student" at Harvard University. As a farm kid from Tennessee who had never lived in a city, never lived away from home, and never taken public transportation, I experienced a lot of internal "static" and disorientation.

For the first two weeks Harvard students attended any classes of interest and only then settled on a schedule and registered. I chose Latin, Shakespeare, and Abstract Algebra. Latin and Shakespeare were rigorous, but Abstract was a killer. Andrew Gleason assigned almost every exercise in the first several chapters of Herstein plus a research problem. The pace was at the limit of my ability.

I went to my advisor after the first month and asked to drop Abstract. She gently informed me that "at Harvard, we believe in personal responsibility. We don't drop classes. We expect you to finish what you start even if it is painful."

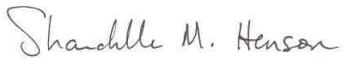
I was shocked, tired, and tearful. She was firm, yet kind and sympathetic. With no other option, I completed Abstract and finished the semester with good grades in my classes. (When people say Harvard has grade inflation, I laugh. Sort of.)

Most undergraduate mathematics courses are not as tough as Gleason's Abstract, and Andrews has a different withdrawal policy. Nevertheless, even introductory mathematics can seem insurmountable to some students, and many students experience a lot of internal "static" that makes it difficult for them to focus. We, too, have a duty to help our students (at all levels of mathematics) learn the valuable lessons of persistence and personal responsibility.

Right now the Department is developing its ten-year Strategic Plan. Along with our vision for growth and excellence, we wish to create with intentionality a strong culture of personal responsibility, persistence, and ethics. We believe that nurture and accountability are not mutually exclusive, but are complimentary. We maintain high expectations for our students in a mentoring and caring environment, knowing that the hard lessons they learn when faced with difficulties are invaluable for their future success.

Next year I will share more of our vision for the future. For now, I wish you a Merry Christmas. We are indeed fortunate to have a Mentor who is present in our difficulties and challenges and who transforms them into life-enhancing lessons. When we miss the mark, we are forgiven and encouraged to try again. When we know we are loved, we can afford to reach for excellence. May you recognize and embrace Jesus' presence, love, and acceptance this Christmas.

Warm Regards,



Shandelle M. Henson
Professor and Chair of Mathematics
http://www.andrews.edu/~henson/

PS If you would like to participate in our efforts to mentor students for a life and career of excellence, you may fill out the donation slip below. Thank you so much for your contributions; they go a long way.

Amount	Fund
_____	Math Department—discretionary expenses
_____	Edward J. Specht Scholarship Fund
_____	Harold T. Jones Scholarship Fund
_____	Endowed Chair in Mathematics
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