
MATH@ANDREWS

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S. M. Henson, Editor

December 2007

What Are They Doing Now?

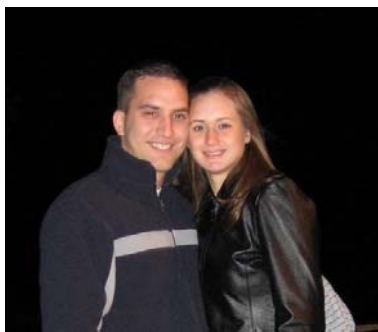
Mathematics students go on to diverse graduate programs and careers.

Chantel Blackburn (BS 2006) is in her second year of the PhD program in the Department of Mathematics at the University of Arizona in Tucson. See her letter on page 6.

Christina Burden (Minor 2006) is working on a master's in biology at Andrews. She is constructing mathematical models of the male cricket call in relation to environmental variables such as temperature, time of day, and geographic distribution. Her thesis advisor is Professor Gordon Atkins.

*Medicine—Law—Education—Atmospheric
Science—Audiology—Mathematics—Physics—
Engineering—Chemistry—Biology—Music—
Computer Science*

Jonathan Chong (Math Studies 2004) is currently in his third year of studying medicine at Loma Linda University. This summer he became engaged to Andrea Heyn. Andrea is from Bridgman, MI and attended Andrews University for two years.



She is graduating from La Sierra University this year and plans to study medicine. They will be married on July 13, 2008. Jon joined the Air Force as a second lieutenant on scholarship to fund his medical education. He will serve in the Air Force upon graduation

and completion of specialty training. Jon hopes to match with a general surgery residency during his fourth year. He was able to participate in research with the Neonatology Department two summers ago between his first and second year. He studied "Effects of oxygenation-deoxygenation cycling on nitrite metabolism in blood in vivo and ex vivo." The abstract was published in a medical journal, and Jon presented the work at a local conference in Loma Linda as well as an international meeting in Toronto, Canada.

Jeffrey Hafner (Math Studies 2005, MS 2006) is currently working on a PhD in physics at the University at Buffalo.

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2007 Math Graduates

Erik Christian Brown (BS Mathematics, Secondary Certification Emphasis, J. N. Andrews Honors Scholar, Pi Mu Epsilon member). Erik is currently teaching five math classes and one English class at Shenandoah Valley Academy. He and his wife Ingrid were married on July 15. Erik is reviving his childhood pastime of building/collecting Lego toys.



Garnett Brendan Cross (BSE Engineering, Mathematical Studies, Physics as a Second Major, Pi Mu Epsilon member). Brendan is busy in his first year of graduate school at Notre Dame, working in the field of aerodynamics, the interference of light due to turbulence. He is in the Department of

Aerospace and Mechanical Engineering, working under Dr. Eric Jumper. Brendan says married life is treating him well and he is enjoying life after Andrews.

Philip Davis Roberts (BS Physics, Mathematical Studies, Pi Mu Epsilon member, Chemistry minor). Philip is still around Andrews, currently doing some contract work at the church. Next semester he may go to the Laser Interferometer Gravitational-Wave Observatory (LIGO) in Washington state. Philip did his honor's research on LIGO data as an undergraduate at Andrews.



Robert Lloyd Wilson (BS Chemistry, American Chemical Society Emphasis, Mathematical Studies, J. N. Andrews Honors Scholar, Pi Mu Epsilon member). Robbie is at the University of Illinois at Urbana Champaign. He is in the Denmark Lab, which is an organic group; Robbie is the first inorganic student in the lab. He will be working on carbonylations of epoxides. Robbie is teaching four discussion sections of general chemistry. He says that he likes teaching and has some cool students. Next semester he will take a class called Physical Methods in Inorganic Chemistry. He has been told that this is a lesson in group theory, so his math background should put him ahead of the game. Robbie says that the chemistry annex is larger than the whole chemistry department at Andrews, and that the math building looks like a stone church. □



ANDREWS UNIVERSITY
DEPARTMENT OF MATHEMATICS

PROGRAMS

- *Bachelor of Science in Mathematics
- *Bachelor of Science in Mathematics Education
- *Mathematical Studies Major
- *Mathematics Minor
- *Mathematics Education Minor
- *Minor in Mathematics of Economics and Finance
- *Behavioral Neuroscience mathematics track
- *Master's in Mathematics and Science (interdisciplinary)

FACULTY

Shandelle M. Henson
Joon Hyuk Kang
Robert C. Moore (CHAIR)
Yun Myung Oh
Lynelle M. Weldon

EMERITI

Kenneth Franz
Theodore Hatcher
Donald H. Rhoads
Edward J. Specht

LECTURER

Keith G. Calkins

ΠΙΜΕ (MICHIGAN GAMMA CHAPTER)

Thomas Adams, President
Eric Shull, Vice President
Danielle Wuchenich, Secretary

EIGEN* (MATHEMATICS AND PHYSICS CLUB)

Benjamin Chase, Math President
Jeffery Riess, Physics President
Erin McLean, Secretary

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Andrews University
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Alumni

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Kami Lizarraga (BS 2005) is in her second year at Columbia University Law School. See the interview on page 4.

Clara Logan (BS 2005) is working on a master's in mathematics at Central Michigan University. She wants to do research in teaching styles.

Laura Mack (BS 2006) is in her second year of the PhD program in Atmospheric Science at Colorado State University.

Larrisa Mann (Minor 2006) is at Central Michigan University working on a doctorate in Audiology. She is in her second year of the four-year program.

Andrea Moore (MS 2006) is working as the Education Specialist at the Family Literacy Center, an initiative of the Community Partnership for Lifelong Learning in Benton Harbor, MI. As the Education Specialist she is responsible for developing and implementing a GED program, recruiting and training volunteer tutors, recruiting clients for each program, and maintaining the daily operations of each program. Andrea was recommended for this position by one of her Andrews professors who mentored her during the 2006-2007 school year when she, along with 6 other students, volunteered to begin a GED program at Harbor of Hope SDA Church in Benton Harbor. That program is still running under new leadership. Andrea has a case load of over 100 clients, and the opportunities for leadership and ministry are great. She lends a compassionate ear as clients share about family issues, religious concerns, and life decisions. She says, "It has been an awesome task. I am relying on God every day to keep me strong and help me handle these situations."

Abimael Santana (BS 2005) graduated with a master's in math from Miami University, Ohio in August and moved to Springfield, MA to be closer to family and friends. He is working with the power grid as a Data Analysis Consultant for the Independent System Operator of New England (ISO-NE). He says that even though his job requires more statistics than he studied at Miami, he feels that it is a good fit. The people are very professional and the job requires a level of analysis that he thinks is ultimately the kind of task for which math prepared him. Abimael says misses Andrews and will always appreciate the dedication of the Mathematics Department.

Roger Schmidt (Math Studies 2006) has accepted a position as Assistant Professor of Computer Science at Union College.

Rochelle White (BS 2006) is finishing a master's degree in music at Andrews University. Her degree is with performance emphasis, specializing in instrumental conducting.

Amy (Wright) Boyd (BS 2005) is in her first year at the University of Michigan Law School. *Note: I received a letter of thanks from the Law School saying that they accepted only 350 of the nearly 6,000 applicants. -Ed. □*

Ed Specht Moves to Bloomington, IN

by Donald Rhoads, Professor Emeritus and Former Chair

Professor Emeritus Edward Specht, chair of the Department for 25 years, is now 92 years of age and living in the Garden Villa nursing home in Bloomington, Indiana. On my last visit I found him and his wife Mary alert and interested in my report of recent European travels.

Since his retirement from Indiana University South Bend, Ed has written a major geometry treatise which employs minimum (independent) axioms and is built on the idea of transformations, as opposed to the more usual approach through similarity. Keith Calkins, teacher in the Math ISD program at Andrews, has typed the manuscript in TEX for publication, and a major publisher has expressed interest in it.

A considerable amount of work remains on the project, mainly cleanup work of various types, corrections, and final decisions about the shape of Chapter 29, which culminates with the polygonal form of the Jordan Curve Theorem. At the present time, Keith is the one with the most comprehensive understanding of the whole work, while I have been reading parts of the manuscript for obvious errors. □

Research Updates

Recent Publications

- **Lizarraga, K. M., Kang, J. H.,** Lee, J.H. 2006. Perturbation of a nonlinear elliptic biological interacting model. *Dynamics of Partial Differential Equations* 3 No.4:281-293.
- **Kang, J. H.,** Lee, J. H. 2006. Steady state coexistence solutions of reaction-diffusion competition models. *Czechoslovak Mathematical Journal* 56 No.131:1165-1183.

Two former undergraduate students, Kami Lizarraga and Chantel Blackburn, appear as coauthors on two publications.

- Cushing, J. M., **Henson, S. M.,** and **Blackburn, C. C.** 2007. Multiple mixed-type attractors in a competition model. *Journal of Biological Dynamics* 1:347-362
- Cushing, J. M., **Henson, S. M.,** and Roeger, L.-I. 2007. Coexistence of competing juvenile-adult structured populations. *Journal of Biological Dynamics* 1:201-231.
- **Henson, S. M.,** Dennis, B., Hayward, J. L., Cushing, J. M., and Galusha, J. G. 2007. Predicting the dynamics of animal behavior in field populations. *Animal Behaviour* 74:103-110.

- **Henson, S. M.,** Galusha, J. G., Hayward, J. L., and Cushing, J. M. 2007. Modeling territory attendance and preening behavior in a seabird colony as functions of environmental conditions. *Journal of Biological Dynamics* 1:95-107.

Recent Presentations

- Shandelle M. Henson gave the opening plenary address at the Conference of Mathematical Modeling and Analysis of Populations in Biological Systems, University of Arizona, Tucson, AZ, October 5, 2007.
- Shandelle M. Henson gave an invited colloquium in the Department of Mathematics, University of Michigan, Ann Arbor, MI, March 9, 2007. □

Faculty Notes

- Joon Hyuk Kang has been appointed editor of the *Journal of Computational Mathematics and Optimization*.
- Yun Myung Oh has served as an editor of the *Far East Journal of Mathematical Sciences* since 2005. She is running a differential geometry seminar on Friday afternoons, and she mentored undergraduate major Daniel Moskala in a differential geometry research project during the summer and fall. Daniel has finished the project and has found two specific curves by solving an ODE.
- Lynelle M. Weldon is collaborating with the Seabird Ecology Team on a paper that uses information-theoretic techniques to identify the most important factors in the dynamics of animal behavior.
- Shandelle M. Henson and her brother John W. Henson IV M.D. of Harvard University Medical School were jointly honored as the 2007 Alumni of the Year at the Southern Adventist University Homecoming Banquet in October. □

2006-2007 Math Awards

At the end of each academic year the Department holds an awards ceremony at which outstanding students from each mathematics course are honored. In April 2007 we granted 31 awards to 26 people. Math major awardees were Ben Chase (Linear Algebra and Calculus II), Brian Ibanez (Probability Theory), Sereres Johnston (Calculus III and Discrete Math), Daniel Moskala (Differential Equations and Calculus III), Styves Romain (Calculus II), Nick Valles (Applied Math, Complex Analysis), Robbie Wilson (Discrete Math), and Danielle Wuchenich (Applied Math, Complex Analysis).

The Department also awarded the Edward J. Specht Endowed Scholarship to Nick Valles and Danielle Wuchenich, and the Harold T. Jones Endowed Scholarship to Daniel Moskala and Sereres Johnston. (For more on the named scholarships, see Ex Cathedra, last page.) □

An Interview with Kami Lizarraga

Kami Lizarraga received a BS in Mathematics in 2005 and entered Columbia University Law School. Here she is interviewed by Shandelle Henson, Professor of Mathematics.



SH When did you become interested in mathematics?

KL I do not remember exactly when I became interested in math, but it was probably some time in high school. I was home-schooled until my senior year of high school, but my mother, despite all her other strengths, is not a math person. From pre-algebra on, I battled it out alone with my math textbooks, and somewhere along the line, I went from hating math to loving math.

SH Where were you born, where did you grow up, and where did you go to grade school and high school?

KL I was born in Phoenix, Arizona but moved to Berrien Springs when my father decided to attend Andrews Theological Seminary. After he graduated, my family spent time in Indiana and Virginia. During that time, my mother home-schooled my sisters and me. When we moved to Richmond, my family decided to enroll all three of us in school. I attended Shenandoah Valley Academy for my senior year (and, technically, my only year) of high school.

SH You were a National Merit Scholar finalist. What schools tried to recruit you when you went to college, and why did you choose Andrews?

KL During my senior year of high school, I received recruiting materials from a wide variety of colleges—Seventh-day Adventist, other private, and public. My choice of college was determined primarily by religious and financial considerations. Because I was a National Merit Scholar finalist, Andrews offered me a full tuition scholarship, which took care of my financial problems. Also, I intended to major in mathematics, and believed that Andrews University offered the best program of the Seventh-day Adventist universities. In the end, I only applied to one school—Andrews University.

SH Did you work while attending Andrews?

KL I worked straight through college. During the semester, I held various positions with the Math Department, including tutoring at the Math Tutoring Center and grading papers for Drs. Weldon and Rhoads. I also tutored for the Student Success Center for a few semesters. During the summers, I went back home to Richmond, Virginia, and worked at Express, a women's clothing store.

SH What type of math do you like the most? What math classes were the most interesting?

KL I chose to major in math at least partially because I absolutely loved my AP calculus in high school. When I started at Andrews, I really hoped that math would all be kind of like Calc 1. (It isn't, if you haven't made that discovery already.) Indeed, I found that over the years, I most enjoyed classes that progressed along the same vein—Calc 2 and 3, Differential Equations, Partial Differential Equations and even Complex Analysis.

SH What other classes at AU were favorites?

KL Outside of my math major, I mostly took the Honors Core and English classes, which basically meant that other than turning in proofs, I spent my college career writing a lot of papers. My favorites were probably Dr. Pittman's literature classes and Dr. Ivan Davis's rhetoric class.

SH How did you make your career decision? What were the alternatives you considered?

KL My career decision was a shot in the dark, to be perfectly honest, but has worked out better than I could have imagined. Through high school and college, I had observed fellow students who breezed easily through math classes until they advanced to a next level and essentially hit a wall where comprehension became much, much more difficult. During my junior year, I hit the formidable wall that is Real Analysis and Linear Algebra 2. Although I completed my math major, I knew by the middle of my senior year that I would not pursue mathematics at the graduate level. The question became, what do you do with a math major, when you don't want to do math anymore? I had already tried science and computer science, and knew that neither was an option for me. Law school as an option first occurred to me when one of my best friends and fellow math major, Amy Wright, looked into law school. From there, my choice was based on functional considerations. First, I did not have money to spend on more years of undergrad, so law school's lack of specific prerequisites really appealed to me. Second, if you can get into a competitive law school, and then survive it, you are absolutely guaranteed a job at the end. I admit it—that's all I needed to decide.

SH How did you decide to which schools to apply, and how did you decide on Columbia?

KL Simply put, admission into law school is about two things: (1) your GPA and (2) your LSAT score. That's it! Other considerations—major, extra curricular activities, personal statement—play a very, very minor role. My strategy was to apply to a range of schools, based on the average numbers of their previous admittees. I chose some guaranteed-acceptance schools and some reach schools. I also only applied to schools in geographic areas where I wanted to live after graduation.

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Kami Lizarraga

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When I received my acceptance letters, the two clear frontrunners were Columbia and NYU, which were the best schools into which I was accepted. Law schools are kind of strange in that way—they are officially ranked, numbers 1 through 180, and which law school you go to almost entirely determines which jobs you can get, from large firms to government positions to public interest organizations. It's kind of sad, but it is 100% true.

SH What kind of "deal" do you have at Columbia? Do you teach? Are you on a fellowship?

KL Columbia does not require students to work during the school year. In fact, they forbid work during the first year, which has a fixed curriculum and is extremely difficult. I did not have a job during my first year and have no idea how anyone would have the time! However, after first year ends, most students obtain some kind of legal internship for the summer, although this is not required. The second and third years of law school are a different story. Columbia has no requirements per se, and students can take any classes they want, as long as they meet the credit requirement. Other than traditional lecture classes, Columbia offers seminars, independent study, externships, and practical clinics that also count for credit. Students have the option of working as a teaching assistant for a professor or working part-time for a law firm.

I think a math major is an excellent choice for a student planning on going to law school.

SH Tell me the sequence of events that will happen over the next few years in your career.

KL As strange as it seems, law students interview for their after-graduation job at the beginning of the second year of school. I went through the interview process over the last few months and recently accepted an offer from a law firm in New York. I will work at this law firm as a summer associate over next summer, between my second and third years of law school. The common practice at law firms is to extend an offer of permanent employment at the end of the summer to all summer associates who make the cut. I will then complete my final year of law school and hopefully pass the bar exam in 2009!

SH What do you see yourself doing 20 years from now?

KL I am really not sure at this point how my career will develop over the years. I will do the big law firm thing for a few years, which will help me gain experience as well as pay off my formidable loans. However, I do not really see myself working at firms until retirement. My plan is to wait until my family and I attain financial stability and then find a job with a public interest organization.

SH Did your math major help prepare you for law school? If so, how?

KL I think a math major is an excellent choice for a student planning on going to law school. Before I came to law school, I had the stereotypical idea of a lawyer as an attorney flamboyantly arguing a case in a courtroom—yes, like you see on TV. That picture is a tiny slice of the profession as a whole. The reality is that most of the practice of law is hours and hours of research and writing. As a junior attorney, research and writing will probably be almost 100% of what you do, with the rest being something like tabulating documents in binders. The practice of law is also really anal. It is about finding the right rules in a ridiculously broad universe of caselaw and statutes, and then convincing your audience that your way of applying those rules is the best way, all in a standardized argument structure. I think a math major is excellent preparation for all this fun. Math teaches you how to approach a problem, select the right rules, and then use those rules to construct a tightly-knit argument (proof) to obtain the desired solution. The practice of law involves exactly the same process. However, I would strongly encourage a math student planning to go to law school to take a significant number of writing-intensive classes—English, political science, history, or anything else requiring a number of papers. You absolutely must be a decent writer to survive law school, and, later, the practice of law. I would also advise taking a few classes in US government, the political process, or constitutional law. I did not take anything like that, and I have survived so far. However, I have definitely felt at times my lack of education on US legal and political systems. Any background information on these subjects can only help, especially because many of your colleagues will have majored in something like that.

SH What are your hobbies?

KL I have no time right now for hobbies!

SH If you can think of anything else you'd like to share, please do so!

KL Just simply, good luck to any one of you who decide to apply to law school! It turned out to be exactly the right choice for me. □

TIME News

by Robert C. Moore, Chapter Advisor and Department Chair. The Michigan Gamma Chapter of Pi Mu Epsilon was chartered at Andrews University in 1970.

Nine new members were inducted into the Michigan Gamma Chapter of Pi Mu Epsilon on April 29, 2007 in a ceremony held at the Moore residence. President Nicholas Valles presided over the meeting and led the initiation ceremony.

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TIME

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He was assisted by Christopher Armstrong, Vice President, and Thomas Adams, Secretary-Treasurer.

The new members are Daniel Barlow, Sereres Johnston, Laura Nelsen, Ruth Romulus, Yoko Shinmyo, Eric Shull, Robert Moore, Yun Myung Oh, and Tiffany Summerscales.

The newly elected officers for 2007-2008 are Thomas Adams, President, and Eric Shull, Vice President. Danielle Wuchenich has been appointed Secretary-Treasurer.

Former department chair Dr. Donald Rhoads gave the lecture, entitled "Some Elementary Considerations for Understanding the Jordan Curve Theorem." The lecture was based on work Dr. Rhoads is doing in collaboration with Dr. Edward Specht, also a former chair of the department. Dr. Rhoads was a charter member of our Michigan Gamma Chapter of PME and for many years served as chapter advisor. He took PME very seriously – in fact, PME Induction Ceremonies were among the rare occasions for which he wore a coat and tie! Because of distance, he has reluctantly passed the baton to Dr. Robert Moore who now serves as chapter advisor. □



2007 Inductees

Chantel Blackburn Writes

Chantel Blackburn (BS 2006) is in her second year of the PhD program in the Department of Mathematics at the University of Arizona in Tucson.

This year has been pretty fantastic. The courses I'm taking are Abstract Algebra, Geometry-Topology, and Linear Algebra. It is a great combination of classes and I'm learning a lot. Since I'm taking two "core" classes (Algebra and Geometry) this year, life has been terribly busy. I never knew I could hate math and like math so much all at once. Even on those late nights as I'm rushing to get a homework assignment



done, I have to just smile and think to myself, "Wow, isn't this cool? I'm just sitting here learning a bunch of math."

School isn't all about studying, of course. I'm having a grand time this year teaching precalculus (so in addition to the trigonometry course I taught last year, I've finally completed my prerequisites for the Calculus I class I took my first semester at Andrews). It's fantastic that I already get to do what I want to do (teach), and getting paid to do it isn't too shabby either.

Our graduate coordinator likes to say, "If you have time to do anything other than math, you're not working hard enough." So, I guess I might not be working hard enough by his standards, but I can't help but explore a bit outside of my world of math. I have found a wonderful church family here in Tucson, enjoyed the fresh mountain air of Camp Yavapines for a few days during Arizona Camp Meeting, visited Mt. Lemon and Saguaro National Park on several occasions, had my first 4-wheeling experience (and first ride in a jeep) in Payson, not to mention eating some great food or that recent round of minigolf followed by a blizzard treat at Dairy Queen.

Graduate school. It's a different world, that's for sure. I don't think I'd ever really want to put myself through this again, but for now I'm just enjoying life in my current role as: graduate student (translated, of course, person who gets very little sleep and tells really lame jokes). Best, Chantel B.

You can access Chantel's University of Arizona homepage at <http://math.arizona.edu/people/profile.php?n=cblackburn>. –Ed.

Endowed Professorship of Mathematics

by Donald Rhoads, Professor Emeritus and Former Chair

When I assumed the chairmanship of the Department of Mathematics in 2000, I found that no fewer than 11 departments had a specific math prerequisite for at least one course, the total number of non-math courses with a math prerequisite exceeded sixty (60), and no other department supplied prerequisites for more than 12 "outside" courses. Wow! Our discipline may not have quite the glamour of some other disciplines, but it is terribly important to the whole enterprise.

And that is why we are campaigning to strengthen the foundations through an Endowed Professorship of Mathematics. Here's what it can accomplish:

- 1) Provide a faculty position in addition to those provided by the university budget.
- 2) Attract an additional teacher-scholar of distinction, who will be an exemplar of fine teaching and will involve students in research.

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Endowed Chair

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3) Make available additional courses for our majors, even if they do not have many students. Specifically I am thinking of topology, which has become quite standard for undergraduates planning to pursue graduate study in mathematics.

4) Enhance our ability to serve the needs of other departments that depend on mathematics. Shandelle Henson has pointed the way with her work in Mathematical Biology—we need to pursue this model, both by strengthening her program and by emulating it in other disciplines.

5) Give the Department a “margin of excellence” to pursue initiatives that greatly benefit our students but do not immediately pay for themselves.

More than 60 non-math courses in 11 departments have a math prerequisite. No other department supplies prerequisites for more than 12 “outside” courses.

At present we are accepting donations from individuals. These donations are very important at this stage because when we go after foundation and corporate money, we need to be able to point to a high percentage of alumni as donors. This money is being placed in a Seed Money Accumulation account that will accumulate income as part of the University’s endowment. At some point, in coordination with our Advancement Office, we will cast the net for donors of amounts on the order of \$100,000. Potential donors include foundations and corporations whose wealth is based on technology and who recognize the importance of mathematics. At this stage the paperwork to formally set up the endowed professorship, and name it, will be completed.

We alumni can show the way by contributing to the Endowed Chair fund. You may use the donation slip provided. □

~~~~~In Memoriam~~~~~

Bruce Lee

*Adapted from a eulogy by Robert Kingman,
Professor of Physics*

Bruce Elwin Lee, Professor Emeritus of Physics and Director of Physics Enterprises, passed away on Wednesday, September 19, 2007. Professor Lee was born August 14, 1926, and joined the faculty of Andrews University in 1956.

Bruce Lee was a teacher of physics for nearly 40 years. He taught thousands of students, many of whom entered medicine, dentistry, education, and many other professions.



He had a wide variety of interests and taught courses such as sailing, acoustics, chemistry, physical science and general physics. Bruce had a passion to present natural phenomena with vivid demonstrations. He developed the force sensor, one of the two most important sensors used in teaching physics labs. He also developed the wave machine, force plate, and cloud chamber manufactured by Physics Enterprises.

Bruce created and administered Physics Enterprises for 20 years, providing valuable products for teaching physics as well as employment for Andrews students. He directed the manufacture of over 180,000 of the 250,000 student force sensor units sold, and was awarded the Distinguished Service Citation by the American Association of Physics Teachers.

Bruce contributed over 4 million dollars in profits to Andrews, providing money for student scholarships, grants to support innovation in teaching and research, and funds to bring in outstanding new faculty. He provided funding for the engineering study group that led to the establishment of the new 4-year engineering program, and made possible a \$600,000 grant which, with matching funds, will provide 1.2 million dollars to develop the engineering program.

We miss Bruce Lee—our friend, colleague, and mentor.

Robert Charles Davidson



Shortly after mailing last year’s newsletter, we received a letter from Carol Davidson, wife of Bob Davidson, informing us that Bob had passed away. What follows is an excerpt from the memorial service program.

Robert Charles “Bob” Davidson, 66, passed away peacefully while surrounded by his family on August 29, 2006, in Colorado Springs.

Bob was born in Glendale, CA on December 23, 1939. In 1961 he received his BA in physics from La Sierra College (now La Sierra University), Riverside, CA and his MAT in mathematics from Andrews University, Berrien Springs, MI in 1964. He met his wife Carol while they were both students at LSC and they were married on September 10, 1961 in Escondido, CA. Bob taught physics and mathematics on high school and college levels for several years before transitioning to computer programming. He retired from Lexis Nexis in 2004 as a senior software engineer.

Bob loved the out-of-doors and had a way of sparking in others an appreciation for God’s creation. He won awards for his nature photography, which focused on the mountains and deserts he loved. He hiked many of Colorado’s “14ers”, 4-wheeled many high passes in the state, and belonged to The Colorado Mountain Club, Friends on Foot, and Friends of Cheyenne Canyon. Bob was an avid explorer, and shared his

love for travel with Carol. He visited all 50 states, finishing with recent trips to Alaska and Hawaii. Most of his adventures were shared with his children, grandchildren, brothers, extended family and friends.



The Department voted unanimously to adopt the following:

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.

Ex Cathedra

From the Chair

As I begin my second year in this department, I think of Isaac Newton's statement to Robert Hooke: "If I have seen further, it is by standing on the shoulders of giants." By this allusion I in no way suggest that I am like Newton or that I am able to see farther than others – that would be silly! What I am suggesting is that as chair of this department I am following in the footsteps of giants.

Two names in particular have surfaced repeatedly during my short tenure here: Edward J. Specht and Harold T. Jones. Both men served as chair of the Department of Mathematics for many years, and their influence on this department, and the university more generally, is still felt.

Don Rhoads praised Specht when he wrote last April that he "was the inspiration for an entire generation of students who went on to achieve doctorates and have successful research and teaching careers in physics and mathematics." Jones was not Specht's student, but Specht mentored Jones when Jones joined the faculty at Emmanuel Missionary College in 1953. With Specht's help and encouragement, Jones completed a doctorate and went on to mentor many students himself.

Merlynd Nestell, Class of 1957, shared with me the legacy of Specht and Jones during Alumni Homecoming Weekend in September. Merlynd and four of his classmates went on to earn doctorates in mathematics. In honor of Specht and Jones, Merlynd has organized a group of about ten peers who studied under those two giants in the later 1950s to donate a bench for the newly constructed Trashcan Junction plaza. The plaza is located between Lamson Hall, the women's residence hall, and Nethery Hall, currently home to several departments, including Behavioral Science, Communication, English, and History. I'm sure many of you will remember when young men were allowed to escort their lady friends no closer to Lamson Hall than the spot marked by a green trashcan.

Two endowed scholarship funds also commemorate the legacy of Specht and Jones. From the Edward J. Specht Endowed Scholarship Fund, last April we were able to recognize Danielle Wuchenich and Nick Valles, both double mathematics and physics majors, with a combined amount of \$3,500. From the Harold T. Jones Endowed Scholarship Fund we awarded a combined amount of \$3,650 to Daniel Moskala, a mathematics major, and Sereres Johnston, a double mathematics and physics major. I have already purchased beautiful plaques to recognize these outstanding students and the men for whom the funds are named. Eventually the plaques will be mounted in the hall with photos of Specht and Jones and short biographies. Much thanks to so many of you for contributing to these funds and to Bruce Lee, who contributed generously to the funds from his Physics Enterprises proceeds.

One final note is to say that we bade farewell to Shirleen Luttrell last summer as she returned to Virginia to be near family. For nine years Shirleen taught mathematics classes in the Mathematics and Science Center, our program for gifted students from local high schools, and for two years she taught the Arithmetic and Algebra Review course for the Mathematics Department. We miss her very much.

Please keep in touch by sending cards or emails or dropping in for a visit. I look forward to meeting more of you and learning about the history this great department.

Bob Moore



Trashcan Junction