# LITTLE BY LITTLE

University of Florida Department of Mathematics Newsletter Volume 9, Issue 2, SPRING 1996

## Notes from the Chair

We are proud to present the first issue of the Department of Mathematics newsletter "Little By Little", the renamed "Walker Hall Review", still under the supevision of its able editor, Paul Ehrlich. The name change heralds the end of the department's move into Little Hall. All of the faculty, graduate students and staff are now united under one roof and are focusing on making Little Hall a more congenial place for faculty and students to do mathematics.

The College of Liberal Arts and Sciences recognized the teaching and advising prowess of Associate Chair for Undergraduate Studies **Kermit Sigmon** with a 1995–96 CLAS Teaching Award. Kermit was treated to dinner at President John Lombardi's house and proudly displays his photograph with the President.

Jean Larson has turned over her duties as Associate Chair for Graduate Studies to Bernard Mair. Jean ran the department graduate program smoothly for three years and successfully guided many students through the Ph.D. and Master's programs. We wish her a pleasant sabbatical and welcome her successor Bernard.

This spring, David Wilson and Zoran Pop-Stojanovic were named co-directors of the Center for Applied Mathematics and are busy revitalizing the Center. Dave, whose research interests are in image analysis and automated measurements of electrocardiographic images, is enthusiastically fostering an applied mathematics consulting group within the department with a faculty component and a graduate student component. This is part of the continuing expansion of the department's applied mathematics program, following its reformulation of the applied master's degree program. People interested in reading more about this can consult our world wide web pages at http://www.math.ufl.edu, newly reformatted by graduate student **D. Aaron Brask**.

We look forward to a 96-97 academic year which promises interesting and exciting mathematics. The department algebra group will host the second UF Galois Week October 14 through 18 with 13 invited speakers and over 30 participants, all focusing on cutting edge problems in inverse Galois theory. Helmut Voelklein and Graduate Research Professor John Thompson are supervising the preparations for this meeting. The Department of Mathematics, in cooperation with the Institute for Fundamental Theory, will also sponsor an international conference on "Moduli spaces in geometry and physics". David Groisser and Chris Stark are in charge of preparations for this conference. Finally, the department will host the Southeastern Analysis meeting (SEAM XIII) March 14–16, a conference for researchers in differential and integral equations, complex variables, functional analysis and operator theory. SEAM migrates around the southeastern U.S. each year, and organizer Scott McCullough expects over 50 participants.

Once again, it is my pleasure to thank the friends of the Department who continue to contribute generously to the Mathematics activities at UF. The Mathematics Fellowship Fund exceeded the \$20,000 level in the Spring semester, and we were able to convert it to an "endowed" fellowship fund, so it will start to generate interest which can be used to support graduate students in studying mathematics. Among the recent donors in 1996, I would like to thank: Charles Ostner, Laura Rohrbaugh, Jorge Martinez, Buford B. Whitaker, Gregory Golden, Kee Kraftchick, Virginia Lund, Lucille Maloney, Tracy Albert, Paul McKinley, Beverly Brechner, Judith Cook, P. Belinda Kim, Sarah Nagle.

# Professor Frank Garvan Wins Con-

by Paul Ehrlich

As you can all see by glancing at the top of this page, the promised contest to rename the Walker Hall Review is now history. Last spring, I presented mathematics faculty member Frank Garvan with the handsome picture of Colonel Walker after the entries were judged by the Chair and Steering Committee. I was pleased to even receive an entry by e-mail from one of our graduates Professor Debbie Levinson, see the Alumni News Column for more on her career.

Colonel Edgar Smith Walker was born in Missouri and graduated from the U.S. Military Academy. At the (cont. on page 6)

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#### **Graduate Student News**

by Jean Larson

Although he completed the requirements in the summer, **Robert Hatcher** (now at Hewitt Associates in New Jersey) received officially his degree in December 1995. Also receiving MS degrees at that time were **Bryn David** (now at GTE) and **Mao-Chang Li** (now an Import/Export Coordinator for Asian Market in Fort Lauderdale). Furthermore, **Santosh Kamath** was awarded an M.S.T. degree.

This spring **Brandon Underhill** completed his Ph.D. degree. He wrote a thesis under the direction of **Arun Varma** entitled *Some problems in Approximation Theory*.

Eight people received a Master of Science degree this May: D. Aaron Brask, Kelly Briesacher, George Christow, Catherine Ferrer, Michael Hudgens, Michael Swearingen, Eric Tassone, Shuang Yang. Some of these individuals will be continuing for their doctorate.

Also, two people received a Master of Arts and Teaching degree this May, **Elizabeth Leigh** and **Patricia Schnur**; and two more earned a Master of Science and Teaching degree, **Nathan Borchelt** and **Robert Jackson**. It is a pleasure to recognize the academic achievements of these graduates, and we wish them continued success in future studies and job hunting.

Two students were singled out for recognition by International Programs at a recent banquet with *International Student Academic Awards*: **Áron Bereczky** and **Shuang Yang**.

At the annual Faculty-Student Recognition Tea held this April, the department awarded Certificates of Merit in Graduate Student Teaching to Scott Chastain, Robert Jackson, Warren McGovern and Richard White. Certificates of Excellence in Graduate Student Teaching went to Catherine Ferrer, Stacey Levine and Jeremy Underwood. Stacey Levine was further honored as a winner of a university-wide award for graduate student teaching.

Scott Chastain, Michael Hudgens, Jeff Leaning and Bill Moser were given Graduate Student Service Awards. Scott and Beverly Brechner have set up an ftp site: Topology Eprint Service. Scott also organized, along with Thad Beavers, Robert Clancy and Stacey Levine, a half-day workshop on teaching for their fellow grad students. Michael Hudgens was on the Graduate Committee and helped with the revision of the Applied Master's degree program; Jeff Leaning oversaw the Graduate Student Seminar. Bill Moser was departmental representative to the UF Graduate Student Council and also ran a workshop to introduce new graduate students to our computer system with help from Thad Beavers, Mindy Herzog, Warren McGovern, Kevin Peterson and Xibing Wang.

There were two winners this year in the depart-

ment's Robert Long Prize Competition. **Paul Bahrs** won for his paper *Galois and Hessel Compared; a Plutarchian account of Early Group Theory*; and **Gregory C. Bell** won for his paper *The Development of Modern Vector Analysis*.

All of these students are commended for their excellent contributions to the life of the department.

### **Faculty Notes**

by Paul Ehrlich

The Joint Winter Mathematics Meeting of the American Mathematical Society and the Mathematical Association of America was held in Orlando during January 10 - 13, 1995, and also overlapped with the annual meeting of the Association for Symbolic Logic. Professor Paul Ehrlich spoke in a Special Session on Differential Geometry and General Relativity on the topic of "The nonspacelike cut locus revisited." Professor Nicolae Dinculeanu lectured in a Session on Probability Theory on the topic of "Stochastic integration with respect to a stochastic integral in a Banach space." Professors Douglas Cenzer of our department and Jeffrey Remmel of U.C.S.D. organized a Special Session on Recursive and Feasible Logic. Cenzer spoke on "Index sets for pi-0-1 classes" and UF graduate student William Moser spoke on "Approximate inference with generic oracle" in this session. (Cenzer also lectured on this topic in late January at the Recursion Theory meeting held in Oberwolfach, Germany.) Professor **Jed Keesling** spoke in a M.A.A. Session on Chaotic Dynamics and Fractal Geometry on "The Levy dragon and self-similar fractals." Hardy travelers Professors Jean Larson and William Mitchell even flew from a meeting in Oberwolfach, Germany back to Orlando to attend the Association for Symbolic Logic meeting which overlapped with the A.M.S. winter meeting!!

Professor Krishnaswami Alladi organized an International Symposium on Number Theory during January 1 and 2, 1996, at Anna University in Madras, India, as part of the Ramanujan birthday celebrations there. Leading mathematicians from the United States, France, Italy, Japan and India participated in the symposium and gave lectures on Ramanujan's contributions to various areas of number theory. The Proceedings of the symposium will be published as one issue of The Ramanujan Journal, a new international journal which was mentioned in the fall issue of the Faculty Notes column of the Walker Hall Review, of which Alladi is Editor-in-Chief and Professor Frank Garvan is a Coordinating Editor. On December 22, 1995, Ramanujan's 107-th birthday, Alladi gave the Ramanujan Day Lecture entitled "Ramanujan and the theory of partitions - the past, the present, and the future" at the M. S. Swaminathan Research Foundation in Madras, India. In addition, he gave several lectures on his own research and on Ramanujan's work in Madras during December, 1995, at the Tamil Nadu Academy of Sciences, The Indian Institute of Technology, and at the Conference of the Association of Mathematics Teachers of India. On January 3, 1996, Alladi gave an invited talk

entitled "Partition identities involving gaps and weights" at the Tenth Anniversary conference of The Ramanujan Mathematical Society in Tiruchirapalli, India. Enroute to India, Alladi gave a talk at the West Coast Number Theory Conference in Asilomar, California and at the National University of Singapore. In February 1996, Alladi gave an invited talk entitled "A theorem of Göllnitz and its place in the theory of partitions" at the Conference on Combinatorial Number Theory conducted by the DI-MACS Center in New Jersey.

In March, Marcel Dekker published the 664 page second edition of Global Lorentzian Geometry, by Professors **John Beem** of the University of Missouri-Columbia, **Paul Ehrlich** of our department, and **Kevin Easley** of Trumann State University in Kirksville, Missouri. It appeared as Volume 202 in the Pure and Applied Mathematics Series of Dekker.

Professor **Joseph Glover** has been named to the editorial board of the Journal of Theoretical Probability.

Back in Gainesville from his fall semester at the Institute for Advanced Study, Professor **David Groisser** lectured in a Special Session on Gauge Theory at the April regional meeting of the American Mathematical Society held at the Courant Institute on the topic of "Instantons and the information metric."

Professor William Hager along with Professors Donald Hearn and Panagote Pardalos in Industrial and Systems Engineering organized a Network Optimization Conference held under the auspices of the Center for Applied Optimization during February 12-14, 1996. NSF funding for this conference came from three different sectors: 1/3 from mathematics, 1/3 from computer sciences, and 1/3 from operations research. The conference announcement reveals that "advances in data structures, computer technology, and development of new algorithms have made it possible to solve classes of network optimization problems that were recently intractable. For example, recent advances have been made in techniques related to airline scheduling, satellite communication and transportation, and VLSI chip design." Hager was also a participant in a Special Session in Control Theory at the April meeting of the American Mathematical Society in Baton Rouge, lecturing on "Sup-norm stability for control problems with state constraints."

Professor **Chat Ho** attended a regional meeting of the American Mathematical Society at the University of Iowa held during March, lecturing in a Special Session on Mostly Finite Geometries on the topic of "Recent results concerning Singer groups."

Professor **Neil White** of our department, together with Professors **Richard Stanley** of M.I.T. and **Richard Ehrenborg** of Cornell University have organized the "Rotafest", a Conference in Honor of Gian-Carlo Rota which is being held at M.I.T. during April 17 - 20, 1996. White also lectured at this meeting on "Coexeter matroids."

It is now one hundred years since Hadamard and de la Vallee Poussin proved the Prime Number Theorem. Frequent visitor to our department **Paul Erdos** and Atle Selberg gave an "elementary proof" of the Prime Number Theorem in 1949. Thus among many other lectures delivered while paying his annual spring visit to our department, Professor Erdos was requested to speak in the Number Theory Seminar on "Problems and results about prime numbers."

Professors **David Wilson** and **Zoran Pop-stojanovic** were named co-directors of the University of Florida Center for Applied Mathematics in February.

### The Noetherian Ring

by Chawne Kimber and Warren McGovern

Following the lead of students at such schools as University of Maryland and UC-Berkeley, a new organization has been established in the UF Math department. The Noetherian Ring is a group of graduate students in the department which is primarily dedicated to the support and advancement of women in the mathematics community. Of course, participation by all members of the Math department is encouraged. In keeping a global perspective, we plan projects which serve to enhance the quality of the department as a whole. Here is a sample:

- 1. Once a month, we sponsor a speaker who gives a relatively accessible math-related talk. This past year's speakers and topics include: **Barbara Osofsky** of Rutgers University (How to Plan Good Mathematics Lectures), **Jean Larson** (Remembrances of Emmy Noether), **Beverly Brechner** (Fractal Fairy Tales), **Paul Erdos** (Women Mathematicians I Have Known), **Paul Ehrlich** (Women Graduate Studies and the Emergence of the American Mathematical Community), and **Jan Cheah** (Toric Varieties).
- 2. To ease the transition into graduate student life at the University of Florida, we have in place a Mentor Program. Each new graduate student is matched with a veteran graduate student who serves as a mentor. This person is available to answer questions about requirements for degrees, professors, libraries, computers,... etc.
- 3. We aim to play an active role in the recruitment of qualified undergraduate students to the Graduate Mathematics Program. To this end we have an Informal Advising Program for undergraduates. Students are encouraged to drop by the department to ask us any questions they may have about the mathematics program. In this effort to get in contact with undergraduates, we helped the undergraduate mathematics Honor Society, Pi Mu Epsilon, staff their table at the CLAS Majors Expo in April and we hope to get involved in future activities of the organization.

Dr. Jean Larson is the ever-enthusiastic advisor for the Noetherian Ring and the present officers of the Ring are **Chawne Kimber** (President), **Amy Vanderbilt** (Vice President), **Warren McGovern** (Secretary), and **Mindy Herzog** (Treasurer). We are always looking for new projects, so feel free to contact us at nring@math.ufl.edu and visit our home page on the World Wide Web: http://www.math.ufl.edu.

# Alumni of the 1950's : Dr. Emmet Low

by Paul Ehrlich

In a previous issue of the Walker Hall Review, we have presented some reminiscences of Professor Jane Maxwell Day at San Jose State about our former colleague Professor C. Basel Smith. In this issue, we present what Professor Emmet Low, our 12th Ph. D. student with supervisor C. Basel Smith, has kindly recalled of his graduate student days in Gainesville and also his subsequent career. Low received his degree in June, 1953, writing on the topic "Vertical Loading on a Straight Boundary of an Orthotropic Plate."

"Since you are working with the history of the department, it might be of interest to look at the history of one of the persons strongly influenced by the department. I came from a broken home, my parents were divorced when I was five and Mother moved from Illinois to Orlando with her three children. It was in the depression and sometimes we had to use gifts of food and clothing. When I was ten, Mother married a man who was a printer with a fifth grade education. I graduated from Orlando Senior High School in 1940 with reasonably good grades and very high state test scores. However, going to college was not an option and I never even considered it. My first full-time job was at the Food Palace, Orlando's nicest grocery, as a general handyman working twelve hours a day, seven days a week for ten dollars a week. I note that until I enlisted in 1942, I gave my mother half of everything I earned. However, I never felt disadvantaged or disabled, (I am essentially blind in one eye) and never felt anyone owed me anything.

When I came out of the service the last of January 1946, my mother encouraged me to go to college. So, in March 1946 at the age twenty-three, I enrolled in Stetson with no understanding of what a college was or what going to college meant. I had several wonderful instructors who gave me direction and advice, and toward the end of my third or fourth quarter, I decided to go to graduate school after graduation from Stetson in May 1948. I had completed my degree in approximately twenty-six months. During that time, I also delivered the Deland paper daily on a rural route and worked nights in a filling station on Main Street. I was invited to join a fraternity after a year and I did, but I had little time for extra-curricular activities.

I then went to the University of Florida with plans to get my master's as quickly as possible so I could go to work. It was a time of increasing enrollments, and so Dr. Kokomoor insisted that I take a teaching assistantship which I did with some reluctance. They handed me a

course outline for the general math course [ed., C - 42] of which I was to teach two sections. Incidentally, because of the press for classroom space, many classes were taught on a Tuesday, Thursday, Saturday schedule. I started teaching with only a textbook and an outline. Somehow, I made it through the semester."

Here's what Dr. Low's wrote about his early studies during his first year in complex variables and in elasticity theory.

"I must say the mathematical background I brought from Stetson was weak and I became discouraged with trying to do the level of work expected. I was in Basel Smith's Complex Variables and Theory of Elasticity. The first was fairly easy, but the Theory of Elasticity was populated with several doctoral students, several faculty, and one master's student – and me – and I felt over my head. We were using things I had never heard of and I felt lost sometimes. We rotated the presentations of sections, and as the junior member of the group, I felt uncomfortable making my presentations to person much further along then I was. When I wanted to drop it, Dr. Smith gave me some good support and encouragement and I had no real trouble with it....

Dr. Smith was one of the best professors I ever had. He was well organized and gave beautiful lectures. I believe he had taken his Ph.D. at Wisconsin and had worked for the U.S. Forest Products Laboratory in Wisconsin prior to his coming back to Florida and continued to do research for them and the Office of Naval Research. I remember coming into his office one day and he was very excited. Using the mathematics associated with the theory of elasticity, he had just developed a way to make plywood with an increased shear strength over regular plywood. I note that commercial plywood is made with an odd number of layers placed at right angles alternately to accomodate possible warpage due to moisture content changes. His method used an even number of laminations placed at predetermined angles, but not at right angles. One of its potential uses was in the building of hulls of mine sweepers which could have no ferrous metals in them.

Dr. Smith had a lovely wife, a son and a daughter and was a devoted husband and father. I remember his telling me about his years as a student at the University [ed., of Florida] where he was a champion tennis player."

Low wrote that he had gone from teaching general mathematics C - 42 for the Mathematics Department to teaching the general physics in the University College lower division, e.g., the course "Man in the Physical Sciences." [It should be noted, however, that in 1939-1940 for instance, 3 members of the mathematics faculty were teaching this course as part of their teaching assignment.]

"During my first year, I decided to go for a doctorate and not stop with just a master's. I was interested in not just mathematics, but also how it could be used

to answer questions in the real world. I took some engineering courses on the side and ran across a problem in prestressed concrete. So with the help of Dr. Smith and Professor William Lincoln Sawyer, head of engineering mechanics, I wrote a thesis on predicting creep or plastic flow in prestressed concrete. I flirted with leaving school after my master's and going into the prestressed concrete business, but decided against it. Who knows, I might have been much wealthier, but I doubt I could have had a better life than I have had.

That fall, I was offered a full time instructorship in the physical sciences which I took with the understanding I could continue to work on a doctorate. Incidentally, the regular teaching load was fifteen hours which was five classes. The first semester I taught five sections of the same course and, by the end of the week, I could answer the questions in class before they were asked.

The following year they moved me to physics full time where I continued until I graduated and went with the National Committee on Aironautics, now NASA. I had one weak course in physics at Stetson and a junior level course in electricity and magnetism my first year at Florida so I was not very well prepared to teach physics. However, the way we think and work in mathematics helped me function in physics with relative ease and I really enjoyed seeing mathematics relate to the real world through physics. Incidentally, some of the graduate students in physics were good friends of mine and they used to bring problems from their graduate courses to me for help solving. With the good understanding of basic physics principles I had gotten from teaching physics and being fluent in mathematics, I was often able to solve their problems even though I had not had the physics they had had. I have often used this as an example of the importance of having a good mathematical background for any students who expect to do any substantive work in physics, chemistry, or engineering.

At that time, most of the mathematics department was housed in Walker Hall and the physics department in Peabody. There was a landing on the stairs leading to the second floor of Walker where a copying maching using a process with the name Ozalid as I recall. It used a solution that included ammonia and, when it was in operation, you did not linger long going up or down the stairs. We used it to make copies of our theses and dissertations then.

During my years of teaching physics, my office was on the top floor of Peabody along with Morton Teller who was in charge of the physics lab. One day, I went to the bathroom for a moment and, when I returned a big chunk of plaster from the ceiling had fallen on my desk and chair. That someone who kept me out of trouble at the University also kept me from being hurt apparently.

Panty raids occurred in the early fifties when the male students would get together one night after dark, go to a dormitory housing females, invade it and make off with items of girls' underclothing. After a couple of these episodes, the administration used the football team with baseball bats to serve as guards for the girls dorms. I recall some of the boys taunting the football players for interfering instead of joining in the fun and the players responded with it was their scholarships that were on the line and they were not going to risk losing them just for a little risque fun.

Some of the girls joined in the fun and would go to a balcony and toss down armloads of clothing. The university identified all of the participants they could and even conducted searches of some of the rooms of suspected participants looking for evidence such as girls undies. At one of the disciplinary hearings, a young man from South America was charged through evidence found in his room. He commented that he thought the panty raids were just an American college custom, that he had seen pictures of panty raids in Life magazine recently that had occurred on other campuses and, on the night of the raid when the boys said, "Come on, we're going to raid the girls dormitories," he went along for the fun. He stood around watching and, when a girl tossed down a bunch of underwear, he reached up and grabbed one as it floated down to take back as a souvenir. He was let off, but some students were expelled even though the semester was almost over and they lost all credit for work in that semester. I remember sitting in a meeting with some of the administration as they discussed how to avoid or prevent problems like these with students. One of the older adminstrators commented, "Remember there are many more of them than us and some of them are smarter than we are, so we're not going to be able to stop all of it." I often remembered his wise comments over the years as I served as an administrator trying to deal with students. Incidentally, times have really changed and many of the actions taken by the administration then could not be taken now.

Those years at Florida were a wonderful time in my life. Dr. Kokomoor was a warm and understanding person with a delightful family. He was ambidextrous and could write quite well on the blackboard with either hand. I believe his doctorate was from the University of Michigan. He was an ordained Methodist minister and had supported his family while working on his doctorate by serving as a pastor in a church in Ohio [ed., actually in Ann Arbor]....

The atmosphere around the University during those years was really warm and pleasant and, I suppose, somewhat typical of the country for awhile in those postwar years. Most of us seemed to know where we were trying to go and went about our business in a friendly and cooperative manner. I had never heard of drugs other than alcohol, and I never became involved in it. Those years at the University and the people with whom I worked and played, I am sure, helped give me direction and values that stood me well over the ensuing years. I am sure you

and your colleagues are doing the same for the students who are going through now, it must be a little harder. I attribute much of what I have been able to do and any recognition I have received largely to those experiences at the University ....

In January 1954, I went to NACA, where a colleague and I developed methods to be used in the design of larger aircraft that probably is still in use today. This was in the McCarthy era and the atmosphere in governmental research was uncomfortable. A friend, Jesse Oroshink, who had received his graduate degree in physics at Florida soon after I went to NACA, went to work there also. His family was Jewish and had immigrated from Russia. Even though he and his brother had served in W W II and were honorably discharged, he was forced to leave because somebody thought he might be a security risk. I had gotten to know Jesse quite well at Florida. Through him, I learned a lot about Jewish culture and developed, I believe, a more tolerant and understanding attitude toward other cultures that served me well later. So, after about eighteen months at NACA, I went to the University of Miami in 1955 as an assistant professor of mathematics.

When I started at NACA, I was assigned a problem that involved the analysis of stresses around rectangular cutouts in circular semimonoque structures, better stated as around window and doors in airplane fuselages. It involved mathematics that included the use of matrices. My work at Florida did not include matrices, so I had to set about learning about them on my own. It gradually developed into trying to solve systems of integro-differential equations connected with difference equations. We were not able to solve the whole system, but after making some simplifying assumptions, we did get some solutions. Of course, this is normal in almost all applications and what we got was very useful. However, when I went to Miami, one of the first things I did was introduce a course on linear algebra, they did not have one at that time, and it became one of my areas of interest.

I spent 1959 - 60 at the Courant Institute of Mathematical Sciences at New York University as a visiting research scientist. I worked mainly with Joe Keller, but also got a chance to know Peter Lax, Louis Nirenberg, Fritz John, Richard Courant and several others. It was a wonderful experience, and like my years at Florida, had a lasting impact on my work."

Following his return to the University of Miami, Dr. Low was promoted to Associate Professor, then circumstances propelled him into the chairmanship without the rank of Professor. This was an interesting opportunity as Low

"had a bent toward applied mathematics in a department that was mostly pure mathematics, but they asked me so I was willing to give it a try. I did develop a doctoral program and hired some good people including A. D. Wallace and visiting professors like Paul Halmos."

Low then served as Associate Dean, later Dean of the College of Arts and Sciences at Miami University. He also held a joint appointment with engineering and taught things like fluid flow, hydrodynamics and aerodynamics while still in the Mathematics Department. He was involved in the development of a biomedical engineering program with the medical school. He also worked with others on using radar to track hurricanes for the United States Weather Bureau and comments in his letter that the spiral bands around hurricanes happen to be the logarithmic spirals of basic calculus.

In 1972, Dr. Low decided to leave the University of Miami. During the last six years at Miami, he had been isolated from students and teaching as a result of his administrative positions. He had hired a number of Virginia Ph.D.'s in building the department, including A. D. Wallace, so Dr. Low decided to relocate to Virginia at a smaller school where he could be closer to students. He decided to go to Clinch Valley College, as Dean of the College. There he has enjoyed working with students from the Appalachian mountains "with a lot of native ability and good work attitudes." He retired as Dean in 1986 to return to full time teaching. The Department of Education of Virginia was involved in setting up an electronic classroom to offer courses in AP English and AP Calculus in the high schools. So in addition to serving as departmental chair and teaching four courses at Clinch Valley College, Low took on the challenge of doing these television lectures which were broadcast at high schools which had too few students to offer calculus by themselves. Low formally retired in 1989, but remains active helping residents of the area with various mathematics problems involving computers and also occasionally still filling in on the Electronic Classroom network when needed.

We thank Dr. Low for his kindness in providing us with all of this interesting information!

### Garvan Wins Contest (continued)

time of his death on January 1, 1955, he was 96 years old and the oldest living graduate of West Point. Walker fought in the Indian Wars and was subsequently honored by membership in the Order of Indian Wars. He was retired for disability after the Spanish American War, but served nonetheless during World War I as a recruiting officer for the state of Florida.

Walker served the University of Florida as Commandant of Cadets and Professor of Military Science from 1908 until 1919 (i.e., he was in charge of the required military training mandated for all (male) students) and simultaneously taught in the Civil and Mechanical Engineering Departments in various capacities, with a title like "Instructor in Descriptive Geometry" in the 1911 Record. Although Walker retired from serving as Commandant of Cadets in 1919, he continued to teach on a part time basis up until 1945, when he would have been 87! In the 1948 - 49 Record, Walker is listed as still having an office on campus in Temporary Building G.

#### **Alumni News**

by Paul Ehrlich

**Antonio Quesada**, Ph.D. in 1978 with supervisor Professor **Mark Teply**, reports that he is a Professor in the Department of Mathematical Sciences at the University of Akron.

**Natalie Millot**, B.S. 1988, M.S.T. 1990, writes from Dallas that she is now engaged as a Statistician and Technical Consultant at slp Inforware, Inc.

We are pleased to have recently received word from **Debbie Levinson**, B.S. in mathematics in 1969, that she is currently a Professor of Mathematics at Colorado College. Levinson reports that after leaving Gainesville, she moved to Tampa, where she took the MA and Ph.D. at the University of Southern Florida in 1988, then held visiting positions in the USF College of Engineering until moving to Colorado in 1993. She sent me an e-mail report that

"This is my third year at Colorado College. Colorado College is best known as the selective liberal arts college with the 'weird' calendar and nationally known hockey team. The calendar is partitioned into 8 terms, called Blocks, that last 3 1/2 weeks each. Our students take one course per block, thus 8 courses per academic year. For example, a student might take all of Calculus I between Thanksgiving and Winter break in mid-December."

The reader may recall from the Spring, 1994 issue of the Walker Hall Review, reading the news that Dr. **Asha Chapnerkar Vaidya**, B.S. in mathematics in 1985, had taken a position at Western Geophysical after receipt of the Ph.D. in 1993 and also married Shekhar Vaidya (of Haliburton Energy) in May, 1993. We are pleased to be able to report the birth of a daughter, Poonam Vaidya, to this couple on March 29, 1996. The baby, born at 6:06 a.m., was 8 pounds, 10 ounces and was 21 inches long.

Andrew Jauch, M.S. 1992, MEd. 1993, writes from Pembroke Pines, Florida, that he was recently married on August 5, 1995 in Moss Point, Mississippi (congratulations !!). He is currently teaching trigonometry and physics at the Academy of Applied Technology and is also an Adjunct Professor at Broward Community College. He also asks to convey the messsage to Jorge Martinez, Warren McGovern, and Mindy Herzog, "congrats on all your accomplishments !!!"

Patty Belinda Kim, B.S. in Mathematics, August 1995, writes from Centerville, Ohio, where she is holds the position of B-2 Public Affairs Officer with the U.S. Air Force: "Upon graduating from the University of Florida, I received a commission as a second lieutenant from the United States Air Force. I am currently stationed at Wright-Patterson Air Force Base, Ohio. I work as the B-2 Public Affairs Officer for the B-2 Program Office, Aeronautical Systems Center. I'll serve in my current position in a one year rotation. I'll then move (within the B-2 Program Office) into a program management position, which is in an acquisitions career field. My current

position gives me a great program overview of the acquisitions of the B-2 Stealth Bomber. I firmly believe my background in mathematics and my experiences at the University of Florida helps and will continue to help my career in the Air Force. Mathematics gave me an excellent training to process information – highly technical information – to reformat in many numerous fashions. I sometimes find it strange that mathematics helps me to communicate – but not surprising."

Thanks to all of you, for sending in this material, especially to Patty for taking the time to write those helpful comments. Keep the information flowing back to us, folks.

#### News from the CLAS Baccalaureatte

by Kermit Sigmon, Associate Chair for Undergraduate Studies

At the CLAS Baccalaurette held on the afternoon of May 3rd, two of our BS graduates in Mathematics were recognized for their academic achievements:

**Charlotte Antonelli** was among the honored 4-year scholars who graduated with a at least a 3.9 GPA. She completed minors in both Statistics and Business Administration.

Eric Stone was among only eight Valedictorians who graduated with a perfect 4.0 GPA. In addition Eric was selected (by lot says the Dean) from among these eight to deliver the Valedictory Address, the only student to speak. His speech was delightful and entertaining. Eric will be entering graduate school in mathematics in the fall at Princeton University supported by a highly competive NSF fellowship.

Congratulations to Charlotte and Eric as well as to all our other successful degree candidates!

As a postscript, we are further pleased to report that at the August 10, 1996 Commencement, mathematics major **Brent Snyder** was named the Outstanding Male Leader. He is being recognized for his extensive contributions to residence hall projects and events. He served as President of BACCHUS, Boost Alcohol Consciousness Concerning Health of University Students, and was also on the national board of directors of the National Association of College and University Residence Halls.

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