## NEWS IFTTER

# DEPARTMENT OF MATHEMATICS AND STATISTICS



#### December 2002

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# Phonathon Record in 2002

Mathematics and Statistics graduates increased pledges during the 2001-2002 fiscal year. More than 110 alumni pledged \$8,720 to the department and sent in \$8,173 actual gifts. The average pledge received was \$72 surpassing last years average of \$63. Thank you for your generosity!

Your increased support provides funds for scholarships, support of student activities including the Missouri Mathematics Competition, and international travel for faculty.

Your support has made a real difference in our department. Scholarships are extremely important, and so are the student activities that your gifts support.

This year, we will begin calling our alumni starting Jan. 30. When the phone rings please take a moment to share some of your Rolla experiences with a current student, and say, "Yes," when asked for a pledge. Taxpayer support accounts for less than 30 percent of the university's revenue, making your contribution a vital ingredient in the revenue pie. Private funding also helps distinguish UMR from other universities, increasing the value of your education. Any amount you give will be appreciated, and most importantly, your participation will help make UMR a leader in alumni giving among public universities.

Leon Hall, Department Chair

Mathematics & Statistics Department

URL: www.umr.edu/~mathstat e-mail: mathstat@umr.edu

<u>Reminder</u>

Phonathon will be held January 30 and February 2, 3, 4, 2003.

#### Note from the Editor

The cover story in the Summer 2002 issue of the MSM-UMR Alumnus magazine was an interview with Gary Havener (B.S. 1962), who has made a gift (the largest individual gift in campus history) toward the building of the new University Center, which will be built at the corner of Bishop Avenue and Fourteenth Street, opposite McNutt Hall. The Center will be named the Havener Center. Gary has been a benefactor of the campus in many ways; some years ago, he established the Havener Scholarship fund in our department and has continued to add to it over the years.

I was pleased to find that Gary, like a number of us, has become more and more interested in history as time goes on. Generally, as students, we thought of history as a course requirement to be disposed of as quickly and effortlessly as possible so that we could get on with the serious business of taking the important courses in our major department. As time goes on (perhaps because we have actually experienced more and more of what has become history; for example, I remember hearing on the radio in December 1941 that the United States was going to war with Japan), the knowledge of where we have come from (and how we have become what we are) has

become much more interesting. Gary is interested especially in retracing the route of the Lewis and Clark expedition. Leon Hall and I have talked for some time about doing the same thing - though we haven't yet gone past the talking stage. I expect that we may have to settle for retracing the path Henry Schoolcraft took in his tour of the Missouri Ozarks in 1819, starting in Potosi and ending in Springfield about three months later (if I do it, I expect to go much faster by automobile than Schoolcraft was able to do on foot).

We are interested in the many different careers and other activities our graduates have pursued since leaving the campus, and we look forward to hearing from you. As I mentioned last year, we are often asked by prospective students and their parents, as well as others, what sort of career a mathematics degree prepares one for. The best reply we can make is to describe just a few of the activites our graduates have been involved in. Some, like Gary, have established very successful businesses; others have worked in industries as actuaries, engineers, statisticians, or research directors with a variety of firms. A few have gone on to enter professional schools, including medical and law schools, or other professional development programs. We also are interested in finding those areas to which we might give more emphasis as well as those in which our graduates have been well-prepared.

Please let us know what you (and your families) are doing. Our department members, as well as your fellow alumni, are interested. The success or failure of our work as teachers comes from its effect on our students.

Louis Grimm

#### **Comments**



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One of the things I like about UMR is that the term "student-athlete" means what it says, and the emphasis is on the "student" part. Having spent eleven years on the faculty at the University of Nebraska, I have seen the other side, and it's a whole different world. To be fair, Nebraska does better than many big-time sports schools at being serious about academics, but it was the exception, not the rule, when an athlete there took calculus. As indicated elsewhere in this newsletter, one of our GTA's, Ed Starks, has also been a student assistant coach for the Miner football team the last couple of years, and this made me think of F. E. Dennie, another person who combined football and mathematics at MSM/UMR.

Frank Edward ("Spike") Dennie received his B.S. degree in Civil Engineering in 1909 from Brown University, where he also played football well enough to get All American honors his senior year. Remember, the Ivy League was bigtime in football in those days. In the fall of 1909 Dennie came to MSM as football coach and Director of Physical Education. His record in football that first year was 5-4, and, perhaps as important, he increased gate receipts which meant all the bills associated with the athletic program could be paid. From 1912-15 Dennie left Rolla and was football coach at St. Louis University for at least one year, maybe two, and then was city engineer for Webster Groves, MO. His timing was unfortunate, because he missed the glory years of Miner football, the 1913 team, with a record of 6-1-1, and especially the 1914 team, which went undefeated (9-0) and unscored on (540-0) during the regular season. In 1913, MSM defeated Dennie's SLU team 60-0, and in 1914, when the Miners played an unofficial "postseason" game with Christian Brothers College, Dennie was the referee. Christian Brothers must have had the best football team in St. Louis in 1914, because there was a big push by the St. Louis papers and fans for the postseason game with MSM. However, the MSM faculty did not give the team permission to play CBC, and the Curators agreed with the faculty. The team sneaked out of Rolla on the

4:00 AM train to elude any school officials who might have tried to prevent them from leaving town and played the game anyway. MSM won, 27-6, but when the team returned to Rolla, the players were suspended from school for acting in defiance of the faculty's decision. However, L.E. Garrett, the Director of MSM (and a former and future MSM Mathematics Professor), interceded with the faculty on behalf of the football team and got the players reinstated. At least ten of them (the entire squad numbered only about twenty) went on to graduate.

Dennie returned to MSM as Associate Professor of Athletics and Physical Director in 1915, and except for serving in the Army from 1917-19 during WWI, remained here the rest of his life. His days as athletic director were numbered, though. Dennie was not the football coach beginning in at least 1920, but did coach other sports -- the 1920 Rollamo credits him as being "Coach of Basketball and Track" in addition to being Athletic Director, for instance. In 1928, primarily on account of perceived deficiencies in the football program, the alumni created an upheaval in the physical education department and demanded a change, resulting in the resignations of Dennie and S.C. McCollum, the football coach. McCollum left Rolla, but Dennie was transferred to the MSM Mathematics Department as Assistant Professor of Mathematics (note the demotion in rank). Incidentally, the new coaching staff lasted until 1937, when they were in turn replaced because of continuing hopes of creating a winning football team. The new Head Coach (football) in 1937 was Gale Bullman, who was still here, though no longer football coach, when I was a freshman in 1964. The Bullman Multi-Purpose Building on campus is named for him. Miner football has had good years since 1914, including some in the modern era. I don't recall the dates exactly, but there was a ten-year period in the 1970s or 80s, or both, when UMR's football record was better than that of any other Missouri college. This was during Charlie Finley's tenure as head coach.

Dennie's move from athletics to mathematics might not have been unheard of in 1928, but I do not know of any similar cases, and certainly none recently. He remained in the Mathematics Department for twenty-three and a half more years until his death at the age of 66 in January, 1952. At first he taught only the most basic courses, it had been twenty years since he had taken his mathematics courses after all,

but as he got more experience and began to regain familiarity with the subject, he taught a wider variety of courses. In his 1930 essay about the teachers in the MSM Mathematics Department, George Dean had this to say about Dennie: "While new in the business, "Spike" is doing very satisfactory work. He passed his calculus and mechanics at Brown and reviewed them in my own classes several years ago." For the first couple of years, Dennie taught Trigonometry, including Spherical Trigonometry, then in later years added College Algebra, Analytical Geometry, Differential Calculus, Solid Analytic Geometry, and Mathematics of Finance (a two-term course in 1933-34). In 1931, after three years in the math department, he was promoted to Associate Professor. His teaching assignments show a gradual widening of the range of courses taught, as would be normal for someone beginning a new set of responsibilities and working to become a productive member of his new department. Dean and Van Buren Hinsch, who succeeded Dean as chairman in 1930, were breaking him in gradually but steadily.

At the time of his death, F.E. Dennie was the "oldest" faculty member, in terms of total years at MSM, on campus, but two others in the math department, E.A. Goodhue and R.M. Rankin, had longer tenure as members of the department. These three, Dennie, Goodhue and Rankin, were the core of the MSM mathematics department in the 1930s and 40s. They form a bridge linking early faculty, such as Dean, Garrett and Hinsch, with some of the faculty I knew as a student. For example, in 1951-52, the year Dennie died, the department included D.H. Erkiletian, C.A. Johnson, R.H. Kerr, R.E. Lee, and S.J. Pagano, all of whom were here when I came in 1964, and I know many of you remember these people,

"Spike" Dennie spent the last half of his adult life teaching mathematics to freshmen and sophomores at MSM. This year, the College of Arts and Sciences started what I hope is an annual tradition of presenting Excellence in Teaching Awards to selected faculty in the College, with one selection criterion being to have taught at least 100 students during the academic year. I am quite pleased that five members of our department received this award -- you will find their names elsewhere in the newsletter -- and I like to think that Dennie was looking down on them with approval. I also like to think he was watching over Ed Starks some, too, as Ed split his time between teaching, studying, and coaching Leon M. Hall football.

# Students, Faculty, Staff Activities and Special Recognition

One of our undergraduates, Erin Haller, was selected for an NSF-sponsored Research Experience for Undergraduates Program held last summer at Central Michigan University. She worked with Dr. Ken Smith of CMU on a project which is expected to result in two journal articles: a survey paper on semi-regular difference sets in an undergraduate journal, and another, in preparation, for submission to a research journal, with results she presented at the Big Sky Discrete Mathematics Conference in Missoula, Montana in September.

Another undergraduate, Sarah Klein, spent the summer at State Farm Insurance in Bloomington, Illinois, working as a Fire Actuarial Intern, pricing various building insurance products.

Our students continue to perform well in competitions. Once again we fielded a good Putnam group; Robbie Beane, Sandor Swartz, and Daniel Treat were the official UMR team; the highest scorers for UMR also included Dominic Biava, Todd Wilfling and Matt Battles, all of whom finished in the top third of all competitors. Professor David Grow was the organizer of the Putnam team.

In another international competition for undergraduates, the 2002 Interdisciplinary Modeling Contest, held in February, the UMR team, with members Micah Hackett of the Nuclear Engineering Department along with Mathematics students Sarah Klein and Matthew Thacker, received the "Meritorious" designation. Of the 106 teams that participated (47 from the United States, and 59 from other countries), two were called "Outstanding"; 16 were "Meritorious". Of the remaining 88 teams, 28 received "Honorable Mention", and the remaining 60 were designated "Successful Participant". This year's problem was: Make recommendations to the State of Florida for action which would preserve the habitat of an endangered species, the Florida scrub lizard. The participants were required to perform six tasks to help determine factors which contribute to the loss of habitat, and to include together with their recommendations obstacles to their implementation. Professors Mohamed Ben Haj

Rhouma and Gary Gadbury organized the Modeling team.

UMR's Team B (Matt Battles, Daniel Treat, and Deepak Vaid) tied in second place in the Seventh Missouri MAA Collegiate Mathematics Competition which was held in April on the campus of Truman State University. It was the closest finish ever as only two points out of 100 total separated the top three teams. Truman State Team A won with 81 points; UMR Team B and Washington U. Team A each had 79. UMR's Team A (Brian Blaha, Bret Brown, and Garrett Euler) also made a respectable showing, finishing in 11th place out of 23 teams from 13 schools.

Four Ph.D. students, Murat Atmaca, Filiz Dik, Mehmet Dik, and Sibel Pasali finished their degrees this past year. A fifth, David Vlieger, expects to finish in the upcoming Spring.

The College of Arts and Sciences has instituted its Excellence in Teaching Awards to recognize the special challenge in teaching well to a large number of students. The recipients were selected by a committee of the Distinguished Teaching Professors in the College. This year, 19 classroom teachers from across the college received these awards, based on both the student evaluations and the teaching load of the faculty member (instructors needed to have at least 100 students during the year to be eligible). Five of the recipients were from our department: Tom Akers, Steve Clark, Vy Le, Anne Mentz, and V. A. Samaranayake. Tom Akers also won the Campus Oustanding Teaching Award for the third year in a row.

Dr. Elvan Akin (Ph.D., University of Nebraska) has been named Visiting Assistant Professor.

Assistant Professors Mohamed Ben Haj Rhouma and Gary Gadbury both received research grant support this year, Ben Haj Rhouma from the Missouri Research Board, and Gadbury as Principal Investigator on a subcontract for a 4-year NSF Grant to develop and apply statistical procedures in the design and analysis of gene expression studies in plants. The two of them also were faculty sponsors of the award-winning Modeling Team. Ben Haj Rhouma is currently on leave at a university in Oman.

Assistant Professor Martin Bohner organized Special Sessions at two AMS meetings this year. He and Professor Allen Peterson of the University of Nebraska have just finished their second book, to be published at the end of this year; their first book, Dynamic Equations on Time Scales, has just appeared. Both books are published by Birkhauser Boston. Bohner and Peterson were the principal speakers at this year's

Summer School of the Rocky Mountain Mathematics Consortium, which was held at the University of Wyoming. Professors Leon Hall and Elvan Akin also attended this conference, as did Brian Haile (Ph.D. 1997).

At the spring MAA Missouri Section meeting at Truman State, Professor Emeritus Louis Grimm gave the banquet address, entitled Dining, Wining, and Polymaths, which included a sketch of the career of George Reinald Dean (B.S. 1891), who taught in our department for forty years (starting while still an undergraduate!) and chaired it from 1897 until 1930. Dean worked as a pharmacist before coming to MSM as a student; he later worked in an astronomy laboratory and taught in high school before returning here to teach. He published research articles in mathematics, physics, and electrical engineering, and spent summers in the nineteen-teens working in the General Electric Laboratory of C.P. Steinmetz. He also directed the Applied Mathematics Master's thesis of Aaron Miles, who taught for several years in our department and later became the first Dean of Engineering at UMR. Another of Dean's students was Mervin J. Kelly, who, as Director of Research (and later President and Chairman of the Board) of Bell Labs, assembled the group that received the 1956 Nobel Prize in Physics for the invention of the transistor. Professor Leon Hall has supplied much valuable information about Dean's career.

Professor Tom Ingram obtained a grant to the department from the Educational Advancement Foundation, Austin, TX, for mentoring teaching by the Moore method; in addition, the grant sponsored a short-term visitors program for observing the Moore method in use in classes. He gave colloquium talks on this at Baylor University and also at Oxford University, where he served as external examiner for the D. Phil. Degree of Brian Raines, who had been his Master's student here. He also gave an invited half-hour talk at the Spring Topology Conference held at the University of Texas in March.

Associate Professor Vy Le gave a series of lectures at the VIGRE Minicourse on Variational Methods and Nonlinear PDE at the University of Utah which was held for two weeks in May and June. His second book, co-authored with D.D. Ang, R. Gorenflo, and D.D. Trong, has just been published by Springer-Verlag.

Associate Professor Ilene Morgan has been on a traveling research leave this Fall; she has given colloquium and seminar talks at Cen tral Michigan, Michigan Tech, and Southern Illinois Universities while establishing and strengthening research contacts there. While at SIU, she attended the 16th Midwestern Conference on Combinatorics, Cryptography and Computing.

The NIH has awarded Associate Professor Tim Randolph a Quantitative Research Career Development Award (a five year award) for applying mathematical research to biomedical questions, and he is on leave this year at the University of Washington.

Associate Professor Robert Roe, our Director of Undergraduate Studies, served on the grading panel for Advanced Placement (AP) Calculus tests, held on campus at Colorado State University in Fort Collins. More than 650 teachers took part; about two-thirds of them were high school teachers involved with the AP Calculus course; the rest were university faculty. The major benefit for him was the oppotunity to interact with colleagues across the country.

Our Administrative Assistant, Martha Grisham, received a promotion when she moved over late this Spring to direct the Dean's Office of the new School of Management and Information Systems. Martha received a Staff Excellence Award last year; she has done first-rate work for us ever since she came to the department in 1977. From that time till now, she has prevented many problems from arising, and kept minor ones from becoming major, and has given our department only a single problem herself - but a huge one, that of finding a suitable replacement for herself - but she has helped to solve this most effectively. Sharon Matson, whom Martha helped us hire, has been our departmental Secretary for the past two years, has taken Martha's position, and the transition could not have been smoother. We have been very fortunate to have Martha's assitance for many years, and we are also quite pleased to have such a good replacement.

Cyndi Miller has been hired to replace Sharon Matson as Department Secretary. Already, Cyndi has learned to cope very well with all the various duties and problems one needs to solve in that position - one (but not least) of which is deciphering the handwriting of two or three of the faculty members (modesty prevents me from identifying one of them!).

#### Louis Grimm

#### Alumni News

Tom Akers (B.S. 1973, M.S. 1975) has just received another campus Outstanding Teacher Award. He is serving on the NASA review panel for the next space shuttle mission.

Murat Atmaca (Ph.D. 2002) presented a paper at the Spring meeting of the Missouri Section of the MAA. He is now teaching at Izmir Institute of Technology in Turkey.

Linda Brady (B.S. 1970) and her husband continue to work in Reno. Their two sons are now in college studying architecture and computer science.

John Carlson (Ph.D. 1970) has moved to Topeka, Kansas. He retired last year after serving 13 years as Dean of Arts and Science at the University of South Dakota.

Filiz (Ph.D. 2002) and Mehmet Dik (Ph.D. 2002) are living in Conway, Arkansas, where Mehmet is teaching at Hendrix College.

Pat Duvall (B.S. 1962) continues to work at Flight Structures, Incorporated in the Seattle area. His youngest daughter has recently been accepted into the Occupational Therapy program at the Washington University Medical School. His oldest daughter is a professional in Human Resources for Wilder Contruction Company. Pat serves as the Washington State Director for the MSM-UMR Alumni Association, and tries to visit the department whenever he comes to town.

Paul Eloe (M.S. 1977, Ph.D. 1980), Chairman of the Department of Mathematics at the University of Dayton, organized and hosted a Time Scales Workshop there in September (Professors Martin Bohner and Elvan Akin from our department attended); he is also organizing a Special Session on Analysis and Computation for Functional Differential Equations at the Spring AMS meeting in Bloomington, Indiana which is to be held in April.

Marguerite Ethridge (M.S. 2001) married Joshua Corra in May of this year. She is now teaching at St. Charles Community College.

Kimberly Huonker Haley (B.S. 1995) and her husband Craig announce the birth of their son Jacob on May 11, 2001.

Elaine Hauschel (B.S. 1992) has retired temporarily from teaching to care for her two small children (Rachel, 2 1/2 and Adam, 1) at home. Her husband, Dan (M.E. 1990), is project manager with El Paso Corporation in Houston, Texas.

The new University Center building will be named the Havener Center in honor of Gary Havener (B.S. 1962), see Editor's Note.

James Helm (M.S. 1964) is Chair of the Systems Engineering Department in the School of Natural and Applied Sciences at the University of Houston-Clear Lake.

Bradford Kline (B.S. 1988) and Anjula Batra were married in June 2001 in a small ceremony at the Trapp Family Lodge near Stowe, Vermont. They are now settled in Maryland, where Brad is a mathematician with the U.S. Government.

Sibel Pasali (Ph.D. 2002) presented a paper at the spring meeting of the Missouri Section of the MAA, which was held at Truman State University. She is now teaching at Mugla University in Turkey.

Linda Penas (Ph.D. 1985) continues to teach at University of California-Riverside, and is much involved with numerous teaching-related activities besides her classes, including grant proposals and demonstrations in UCR's new multimedia computing facility. As usual, she heads for North Dakota for the Christmas Holidays.

Brian Raines (M.S. 2000) has completed his Ph.D. degree at Oxford University and has been named Assistant Professor at Baylor University. Three other graduates of our department are also teaching there this year: Jeanie Hill (Ph.D. 1998), Jeff Mitchell (B.S. 1993) and David Ryden (Ph.D. 1998). (In addition, Johnny Henderson, who was on our faculty for several years before moving to Auburn, is now on the Baylor faculty, so we have quite a large contingent there).

Donald Rice (MST 1969) is Director of Quality Control for EDS PLM Solutions, which is certified globally in 48 sites and 20 countries

Edward Starks (B.S. 2001) is a Teaching Assistant in our department. He is also assisting with UMR Football Team - I think it is the first time for this sort of occurrence in our department, although there are precedents: H. J. Ettlinger coached the Washington University football team for several years, but spent most of his career as a mathematician at the University of Texas (he was a Ph.D. student of G. D. Birkhoff at Harvard, and did fundamental work with theory of differential equations; the Ettlinger Transformation is a very useful result for second-order differential equations). He directed the dissertations

of more than twenty Ph.D. students at Texas. A more recent case was Frank Ryan, a Rice Ph.D., who simultaneously, during the 1960's and 1970's was a member of the mathematics faculty of Case Western Reserve University in Cleveland, while on Sundays he quarterbacked the Cleveland Browns.

David Vlieger (M.S. 1998) has been named Assistant Professor at Northwest Missouri State University. He should finish his Ph.D. degree in May.

#### **Contributions**

Boeing/McDonnell Douglas Foundation
DST Systems, Inc.
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#### Gifts

Akers, Thomas D. '73 Allen, Mark Andrew '96 Allen, Robert Christopher '95 Alofs, Catherine Ann '90 Anderson, Dennis R. '74 Andreae, Vicki M. '73 Babson, Gail Anne '84 Baird, Thomas B. '63 Becher, Steven John '96 Berendzen, Thomas A. '68 Boberschmidt, Lawrence A. '65 Brady, Dale E. '66 Brady, Linda L. '70 Breig, William F. '62 Bremer, Gary C. '69 Brown, Harmon C. '72 Bruening, James T. '71 Buhrmester, Earl K. '72 Callahan, Susan L. '78 Carlson, John W. '70 Carter, Karen S. '73 Caton, Kurt D. '72 Coob, Gary K. '79 Crabtree Jr., Thomas F. '68

Crawford, Joseph Shawn '96 Crider, Joseph Allen '80 Daniels, Callie Jo '91 Davis, Kevin Thomas '86 Diggins, Sally Andrea '85 Duvall, Henry Pat '62 Edson, Barbara '64 Edwards, Shawn David '92 Eloe, Paul W. '77 Estes, Larry E. '69 Evans, Jesse D. '65 Faoro, Robert B. '63 Fitzgerald, Colleen A. '74 Folta, Peggy Ann '83 Ford Jr., Raymond F. '70 Gerlt, Lori J. '89 Glenn, Harold A. '66 Guffey, James Michael '85 Haas, Douglas James '94 Haas, Gerald N. '62 Haddock, A. Glen Hager, Harold W. '70 Haile, Brian Douglas '91 Haley, Kimberly Ann '95 Hall, Leon M. '69 Hamilton, James R. '73 Hamilton, Kenneth C. '74 Hamm, Jack R. '68 Hand, Linda Marie '82 Haney, Larry G. '68 Hankins, J. C. '76 Hauschel, Elaine Margaret '92 Havener, Gary W. '62 Hawkins, Larry O. '73 Hegemann, Victor J. '74 Helm, James C. '64 Holliday, Robert L. '72 Howard, William T. '74 Huff, Michael Lee '82 Ilges, Shannon Rene '91 Ingram, William Thomas Jenness, Jeffrey Wayne '88 Johnson, Kenneth G. '69 Joiner, James W. '62 Jones, Keith Norman '84 Jones, Rana Elaine '87 Kieffer, John C. '67 Killinger, J. Curtis '73 Kingston, Joseph V. '67 Kirgan, Mary Ellen '93 Kline, Bradford J. '88 Kos, Martha A. '74 Kubicek, John D. '75

Lane, William L. '73

Leitterman, Pamela A. '75 Levene, David A. '66 Lindesmith, Stanley Benson '90 Lorge, Peggy S. '73 Mann, Gary L. '68 Marlin, Benjamin Arthur '93 Mathis, Stephanie '00 Maupin, Marcel A. '78 McKee, Rhonda Louise '84 Montrey III, Henry M. '67 Morris, Matthew G. '01 Moyer, Joseph D. '68 Neill, James W. '73 Noelker, Amy Lynn '85 Oakes, Janet R. '75 Oberbeck, Keith M. '74 Oster, Teri Lynn '84 Pamperien, Neil C. '64 Parsons, Kenneth C. '74 Pasek, Theodore D. '65 Perry, James D. '70 Pierson, Ossean E. '70 Porter, David Bryan '88 Prater, John B. '70 Reiman, Paul Whitney '83 Rice, Donald Keith '69 Riggs, Donna B. '94 Riggs, John R. '67 Roe, Robert P. Rooks, Joseph L. '73 Rothmann, Derald D. '70 Ryden, David James '92 Saliga, Linda Marie '89 Sallas, William M. '75 Schmidt, Michael T. '75 Schirer, Ivan J. '70 Sherrick, Sherman W. '68 Smith, Robert S. '65 St. Clair, Daniel C. '75 Stahl, Joseph W. '69 Stair, George W. '62 Stansfield, John Joseph '85 Stine Jr., Howard H. '67 Stokes, Brenda Kay '87 Tanzey, William H. '74 Taylor, Nacy Edmonds '77 Wagener, Marian R. '71 Wagner, James Carl '94 Walker, Lois J. '76 Warfield, Melissa Susan '88 Williams, John L. '77 Wist, Patricia S. '74 Wolff, Alan M. '71 Woodard, Joan B. '73

# The Excellence in Mathematics Awards

Each year, the department presents the Excellence in Mathematics Awards to recognize those Missouri high schools whose students who have come to UMR over the previous five years have performed exceptionally well in their first semester mathematics courses here. Awards are given to schools in three categories: large (20 or more), medium (10-19) and small (5-9), depending on the number of students the schools have sent to UMR in the five year period. Schools sending fewer than five students were not eligible. The top schools in each category were then chosen.

The awardees this year, in each category, in alphabetical order, are:

**Large:** Blue Springs; De Smet (St. Louis County); Jefferson City; St. John Vianney (St. Louis County); St. Louis University High.

**Medium:** Hazelwood West; Lee's Summit; Pacific; Viburnum C-4.

**Small:** Blair Oaks (Jefferson City); Fatima (Westphalia); Mountain Grove.

Previous awardees cannot repeat for three years. Several of these would otherwise have again qualified for this year's award: Large: Francis Howell North (St. Charles); Jackson R-2; Helias (Jefferson City); Lafayette (St. Louis County); Rolla. Medium: Glendale; Mehlville; Mexico; Popular Bluff; Ste. Genevieve; St. Francis Borgia (Washington); Washington. Small: Potosi; Springfield Catholic.

### Leaving a Legacy Through Your Will

A planned gift makes a perpetual statement about your dedication to MSM-UMR. While many may not be able to establish an endowment today, they find that they are able to leave a significant legacy to the university through a planned gift, such as a bequest, life income gift or life insurance. By making a planned gift, you show your loyalty to an institution that has played a significant role in shaping your future. For more information about giving a planned gift, contact Judy Cavender at 573-341-6090 or e-mail her at judyc@umr.edu.

## The Heritage Society

Throughout its history, MSM-UMR has benefited from the generosity of alumni and friends who have provided support through their bequests and other planned gifts. The Heritage Society is our way to recognize those who have invested in the university's future through planned gifts. These gifts include a variety of testamentary and lifetime arrangements that provide future support for the university and financial benefits for the donor.

Take advantage of Planned Giving through the Heritage Society. To request information on the benefits of membership or to learn more about ways to remember UMR through a planned gift, call the Office of Planned Giving at 1-800-392-4112 or email judyc@umr.edu.



The past summer, as in every year since 1996, teachers in the region came to the summer statistics workshops conducted by Associate Professor V. A. Samaranayake. These workshops are patterned after the workshops developed by the American Statistical Association, and have been funded by the Missouri Coordinating Board for Higher Education. In recent years, Dr. Sam has held three sessions for each summer workshop, with different sessions for elementary, middle, and high school teachers. These workshops provide assistance to the participants and their schools, and also help us maintain contacts with schools in our area. However, the most important result is the opportunity to increase statistical awareness. It is impossible to overemphasize the value of mathematical and statistical literacy for our citizens, who are continually exposed in the media and elsewhere to all sorts of claims, testimonials, and hucksterism.



Elementary School Workshop



Middle School Workshop



High School Workshop

## Awardees



V.A. Samaranayake Excellence in Teaching Award



Tom Akers Excellence in Teaching Award & Campus Outstanding Teaching Award



Vy Le Excellence in Teaching Award



Stephen Clark Excellence in Teaching Award



Anne Mentz Excellence in Teaching Award

## Let us hear from you

mail to
Mathematics & Statistics Department
University of Missouri-Rolla
Rolla, MO 65409-0020

fax to (583) 341-4741

or

e-mail to

<mathstat@umr.edu>

Name	Years attending UMR
Current activities/interests	
Family	
News/plans	

or