## **NEWS LETTER**

December 2003



Mathematics & Statistics Department URL: www.umr.edu/~mathstat email: mathstat@umr.edu



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### Comments from the Chair

One thing about the undergraduate college experience that is different now from the way things were in the "good old days" is that now, students have many more chances to become involved in research while they are still undergraduates. Our department is no exception to this trend, and you will see elsewhere that one of our majors, Sarah Klein, has not only participated in a research project, but also has made a presentation about her work at a national conference. Sarah is not the only UMR Math/Stat student who has been involved in research, and this year I want to describe some of what she and the others have been doing.

Sarah's project is in statistics and deals with risk assessment for people who work in hazardous environments, under the direction of Dr. Gary Gadbury. She used theories about selective and biased reporting and statistical models to explore how risks are communicated by the scientific and technical community, how risks are reported by the media, and how risk are perceived by the public. The title of her paper is "Counter-Intuitive Probability in Risk Assessment", and the project grew from



### Reminder

Phonathon will be held January 29 and February 2,3,4, 2004.

discussions with faculty in nuclear engineering about how the public perceives risks associated with hazardous technology. Before she was done, Sarah found herself learning about psychology, sociology, and economics in addition to nuclear engineering and statistics. That's the way research works - you go wherever the project leads you and learn what is needed along the way.

In the summer of 2002, Erin Haller, then a Junior mathematics major, participated in an OURE (Opportunities for Undergraduate Research Experiences) at Central Michigan University on the topic of relative difference sets. That summer, the undergraduates mainly performed computations, and while Erin became good at doing the computations, she did not yet have enough mathematical background to completely understand the significance of what she was doing. After returning to UMR the following fall, she gave a presentation to the department about her OURE experience, and in Spring 2003 she did a Special Problems course with Dr. Hene Morgan on group theory and combinatorial designs in order to fill the holes in her background. As a result, she has gained more confidence when presenting her results, and was able to contribute more to the paper resulting from her OURE

### DEPARTMENT OF **MATHEMATICS** AND STATISTICS

project. Again we see research leading the student to learn more, and more importantly, wanting to learn more.

Kirby Moreland, a Senior, received a UMR OURE award, and is working this fall with Dr. Matt Insall on a project based on a paper by Dr. Insall and John Seiffertt, (a B.S. and M.S. alum of our department) about the classification of certain linear differential equations. Kirby is working on a computer program to implement the theoretical results in the Insall-Seiffertt paper that will include a user-frendly interface for entering the equation to be considered, checking the equation to see if it fits the necessary criteria, and if it does, transforming the equation to a simpler form. Kirby has had to extend his knowledge of differential equations and also apply his programming skills to this particular setting. As some of you know, differential equations is one of my own interests, so I will be interested in what Kirby and Dr. Insall come up with.

Dr. Insall is supervising another UMR OURE project this fall, in which Jennifer Garrison, a junior, is looking at the problem of mathematically modeling teaching and learning processes using mathematical logic. The ultimate goal is the development of the theoretical basis for an automated tutor. Jennifer found that she needed to learn some graduatelevel mathematical logic and more set theory than she got in our standard courses. She also has been introduced to library research to get up-to-date on what is currently known about automated reasoning techniques for the development of computerized tutoring.

These four are the current projects - other students have done other research in mathematics and statistics during the last ten or fifteen years, and I could have probably described three or four each year. When the students present their work at conferences. something we encourage them to do, we are usually able to support their trips from the department Development Fund, which is composed of contributions to the department that are not earmarked for any special purpose. such as scholarships or graduate student support. Thus, your generosity makes it possible for the students who do research to enjoy some of the benefits, by underwriting their participation at conferences and meetings, where they can both increase their own professional visibility and at the same time provide good PR for the department and UMR. It is great to see students take on projects like these and to watch them grow intellectually and personally because of their research work.

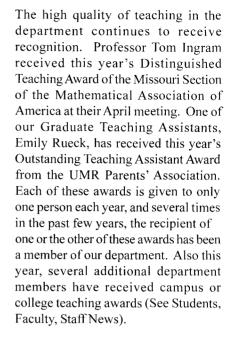
### Leon Hall

The ancient Greek philosopher Plato thought that mathematics was the supreme form of knowledge and the key to all other knowledge.

Mathematics is a product-a discovery- of the human mind. It enables us to see the incredible, simple, elegant, beautiful, ordered structure that lies beneath the universe we live in. It is one of the greatest creations of mankind-if it is not indeed the greatest.

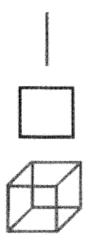
excert from
" Life By The Numbers'

### **Note from the Editor**

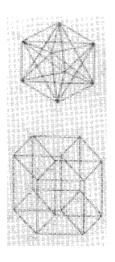


We are, as always, interested in the many different careers and other activities our graduates have pursued since leaving the campus, and we look forward to hearing from you. We often are asked by prospective students - and especially their parents - as well as others, what sort of career a mathematics degree prepares one for, and we can give no better reply than to say what our graduates have been doing. We are also interested in comments from you to find areas we might emphasize more, as well as information about those where our graduates have been well-prepared. Our graduates have been able to compete successfully, either in graduate school or throughout their employment, with graduates of any other university in the country. Nonetheless, there are always areas for improvement.

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



We are accustomed to the geometry of the line, the square, and the cube, but in the progression to the four-dimensional hypercube, the structure becomes mind-boggling.



excert from
"Life By The Numbers"

Louis Grimm



## Professor Tom Ingram Receives MAA Award

At the April meeting of the Missouri Section of the Mathematical Association of America, Professor Tom Ingram the section's 2003 received Distinguished Teaching Award. We have observed Tom's superb work with students ever since he arrived on campus in 1989 to chair the department. He led the department by example. As a classroom teacher, his students caught from him the excitement in discovery. Many continued to work with him as graduate students; he directed the research of about two dozen master's or Ph. D. students: several of these have made seminal contributions to the field of Tom's internationally recognized expertise, continuum theory.

Tom has been a first-rate teacher at every level. He chose to be one of the group of teachers who initiated the classroom use of calculators in the calculus sequence - another instance of leading the department by example. While at the University of Houston, he developed a course to better prepare mathematics majors for the advanced calculus sequence, and modified it to use as a basis for our present Foundations of Mathematics course. One feature was the requirement that all the students write up and turn in to him proofs of selected problems. This improved their writing skills, and was

especially helpful to students reluctant to present their work in class. He twice received a campus Outstanding Teacher Award, and four other times (during the years he chaired the department) failed to receive it only because, although qualifying in all other categories, he did not teach enough students or courses during the year to be eligible for the award.

For the last two years, Tom has received grants from the Educational Advancement Foundation to help educate others in the use of the discovery method in teaching mathematics. A few years ago, he was a member of a panel discussion on this topic at the Annual Meeting of the AMS. In fall 2001, he, together with Professors Hall and Roe, taught special sections of second semester calculus using the discovery method and, together with Professor Roe, coauthored notes which later were used in one of our MST courses. This current year, having just retired from UMR, he is serving as Visiting Profesor at Baylor University as a mentor for their faculty to implement this teaching method as well as to assist them in developing their new Ph. D. program.



In Memory of ....
Dr. Charles A. Johnson
1915-2003

Professor Emeritus Charles A. Johnson died on July 23, 2003 at the age of 88 following several years of declining health. He taught in the department from 1946 until his retirement in 1982. He initiated and continued to guide the program through which a student could

get a UMR Applied Mathematics Degree and also receive certification to teach high school mathematics in Missouri. The teacher education program at UMR has grown to over 180 students in several disciplines today. Our department has turned out some of the best-prepared mathematics teachers in the state, and Professor Johnson deserves much credit for this. In addition to his teaching, he was active in the 1950's and 1960's in applied research, working during the summers for Admiral Corporation, Convair, McDonnell Air, ARO Inc., and Argonne National Laboratory as Senior Engineer or as a consultant. He and his wife Peg were among the founders of the Civic Music Association, which organized the first classical concert series in Rolla. He also served on various civic organizations, including the board of the Rolla Sheltered Workshop, Habitat for Humanity, the Audubon Society, and the Rolla Optimist Club.

When he retired in 1982, he reflected on his pride in both the UMR mathematics program and the students here, saying, "The students are encouraged to direct their efforts toward using mathematics to solve real problems, not just in mathematics, but in any number of interdisciplinary fields. I have enjoyed my years of teaching at UMR and I like to think I have held high standards. I'm proud of the way students here perform". Many others, including many superb teaching assistants, as well as faculty, who have taught in our department, going back even before the days when George Dean came here as a teaching assistant in 1890 and later returned to chair our department for more than 30 years-would concur with his statement.

Louis Grimm



# Students, Faculty, Staff Activities and Special Recognition

Last year, the College of Arts and Sciences instituted its Excellence in Teaching Awards to recognize the special challenge of 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, three of the recipients were from our department: Tom Akers, Steve Clark, and Vy Le. The awards were based on both the student evaluations and the teaching load of the faculty members, who needed to have a least 100 students during the year to be eligible. Tom Akers also won a Campus Outstanding Teaching Award for the fourth year in a row.

Our Students again have made a strong showing in competitions. Thirteen UMR students participated in last year's Putnam Exam (the Putnam Exam is regularly held on the first Saturday of December); the results were announced this past spring. The top four of our students. Nathaniel Huff, Joseph Eimer, Erin Haller, and Ed Bosanquet all finished in the upper third of 3349 students in this competition. All four are our departmental majors; Huff and Haller were juniors and have returned to form the nucleus of a potentially strong Putnam team for this year; the other two graduated in May.

Eleven UMR students participated in the Eighth Missouri MAA collegiate Mathematics Competition on April 3 and 4, 2003, held at Washington University in St. Louis. The four UMR teams all finished in the top third of the 33 teams which competed. UMR Team A (Nathaniel Huff, Matt Battles, and Deepak Vaid)

scored 67 points out of a possible 100 to take third (two points from second) place. This year's competition will be held on the Southeast Missouri State University Campus on April 1 and 2, 2004. Associate Professor **David Grow** was the organizer of the teams for both the Putnam Exam and the MAA Competition.

**Dr. Elvan Akin**, who was here as Visting Assistant Professor last year, has been named Assistant Professor. This past spring, she presented a paper at the Spring Regional AMS Meeting in Bloomington, Indiana, and in the summer, she presented another at the Eighth International Conference on Difference Equations and Applications in Brno, Czech Republic. This past year, she has had six papers published or accepted for publication.

Assistant Professor Martin Bohner's work has been cited in numerous research papers; one of his papers. coauthored with Professor Donald Lutz of San Diego State University, was designated a "Fast-Breaking Paper" (in view of the large number of citations it has received from the time of its publication) by ISI Scientific Citation Index. His work has also been featured as a cover story ("Taming Nature's Numbers") in the July 19, 2003 issue of the British "New Scientist Magazine". In the past year he has made a number of presentations, both in this country and abroad, and published about a dozen research papers and chapters in books, as well as his second book in collaboration with Professor Allan Peterson of the University of Nebraska on Dynamic Equations on Time-scales. These works illuminate the connection between ordinary differential equations and finite-difference equations, which has been tantalizingly obscure to many of us who have worked in both these areas. He also has additional books which are forthcoming.

Professor **Steve Clark** spent the month of June at the Department of Mathematics, University of Tennessee-

Knoxville, working with Professor Don Hinton; he then spent most of July at a Workshop on Neuronal Systems sponsored by the Mathematical Bioscience Institute at The Ohio State University.

We have a new statistician, Assistant Professor **David Drain**, who received his Ph. D. degree at Arizona State University. Professor Drain has also had extensive industrial experience, having spent a number of years with Intel.

Assistant Professor of Statistics Garv Gadbury has been investigating genetic expression data from microarrays, a recent technology allowing the study of genetic expression from thousands of genes simultaneously. His research is supported through an NSF Grant for which UMR is a subcontractor to University of Alabama-Birmingham, where Professor Gadbury was given an adjunct faculty appointment. Resulting from this project, he and his colleagues at UAB have several papers in print or forthcoming, and work on additional ones is in progress. He is also a member of a research team representing a NASA funded Center of Excellence For the Study of Aerospace Aerosol Priculate Emissions; two graduate students in our department are receiving partial research support under this center, which includes researchers from UMR, MIT, NASA, the Air Force, and Aerodyne Research Corp. During the past year, he has presented papers at a number of conferences, and recently has been invited to author an entry on subject-treatment interaction for the Encyclopedia of Biopharmaceutical Statistics.

We have a new departmental secretary, **Tammy Hoffman**, who deserves much credit for putting together this newsletter. Even with all the extra work connected with examinations and grades at the end of the semester, as well as the pressure of the impending holidays, she has done a fine job--inspite of the many obstacles we have strewn in her path in the form of last-minute modifications and addenda.

As mentioned before, Professor Emeritus Tom Ingram, who chaired our department from 1989 until 1998, received the 2003 Distinguished Teaching Award from the Missouri Section of the Mathematical Association of America at their meeting at Washington University in April. He is scheduled to give the banquet address at next Spring's meeting, which will be held in Cape Girardeau on the Southeast Missouri State University campus. Tom has just retired from UMR; he and his wife Barbara are building a house in the Texas hill country north of San Antonio. They are spending the current academic year at Baylor University joining the large UMR group already there, which includes UMR graduates Jeanne Hill, Jeff Mitchell, Brian Raines, and David Ryden, as well as Johnny Henderson, who spent several years on our faculty in the early 1980's.

Professor Leon Hall has recently published several papers, including the paper, "Solids in Rn Whose Area is the Derivative of the Volume", in collaboration with Michael Dorff (who served on our faculty until Brigham Young University lured him out west two or three years ago), which appeared as the lead article in the November 2003 issue of the College Mathematics Journal and a paper on time-scale equations written in collaboration with Brian Haile (M.S. 1991, Ph. D. 1997) who is now on the faculty of Northwest Missouri State University.

Sarah Klein, one of our undergraduate majors, investigated risk reporting and biases in perception that result from selectively reported information in a study supported by UMR's opportunities for Undergraduate Research (OURE) program, and supervised by Professor Gary Gadbury. She presented her work at the Joint Statistical Meetings in San Francisco and was lead author on a conference proceedings paper. Her paper also tied for 3rd place in a Sigma Xi paper competition. As a result of her efforts at UMR and summer internships, Sarah received a scholarship from the Casualty Actuarial Society.

Associate Professor Matt Insall has published three papers this year on topics as disparate as differential equations, neural networks with application to manufacturing engineering, and engineering education. He has also directed two undergraduate research projects and presented several papers on lattice theory during the year.

Associate Professor **Tim Randolph** has resigned and moved to the University of Washington to pursue a career shift after receiving a five-year Quantitative Research Development Award from the National Institute of Health to investigate applications of mathematical research to biomedical questions.

Teaching Assistant Emily Rueck received the 2002-2003 Outstanding Teaching Assistant Award from the UMR Parents' Association. This award is given to one UMR Teaching Assistant

Professor V.A. Samaranayake was recently elected as a Vice-Chair of the Council of Chapters of the American Statistical Association; he also was a recipient of a grant of \$133,666.00 from the Coordinating Board for Higher Education, to conduct three statistics workshops for K-12 Mathematics teachers during summer 2003.

Graduate Teaching Assistant **Derek Ye** coauthored a paper with Assistant Professor **Gary Gadbury**, based on results Dr. Gadbury presented at the Joint Statistics Meeting in San Francisco this past August.

Two students received the department's Outstanding Freshman Award this fall: Amberlee Cook and Holly Dameron; both of these were among this year's recipients of Alumni Scholarships.

Our students have received scholarships from four endowed departmental scholarship funds during the year: the Havener Fund, Alumni Fund, Faculty Fund, and the Eck Fund.

This year, both **Dr. Steve Clark** and **Dr. V. A. Samaranayake** were promoted to the rank of full professor. Promotions are scrutinized by three or four committees successively, and promotion to a full professorship has become quite rare in recent years, with exceptional performance required both in teaching and in scholarship. Congratulations, Steve and Sam!



Dr. Steve Clark named Professor



Dr. V.A. Samaranayake named Professor



Dr. Elvan Akin-Bohner named Assistant Professor



Dr. David Drain named Assistant Professor

# The Excellence in Mathematics Awards

Each year, the department presents the Excellence in Mathematics Awards to recognize those Missouri high schools whose students coming to UMR over the previous five years, have performed exceptionally well in their first semester 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 here were not eligible. The top schools in each category were then chosen.

The awardees this year, in alphabetical order, are:

Large: Eureka; Helias; Jackson R-2; Lafayette (St. Louis County); Rockwood Summit.

**Medium:** Joplin; McCluer North; Mehlville; Oak Park.

**Small:** Nixa; Notre Dame; Springfield Catholic.



Previous awardees cannot repeat for three years. Several of these would otherwise have again qualified for this year's award:

Large: Blue Springs; St. Louis University High.

Medium: Pacific; Poplar Bluff; Washington.

Small: Blair Oaks; Sainte Genevieve.



## Departmental Shirts

The Department will take orders for our new polo shirts, available— in men's and women's sizes—for \$20 each. The royal blue shirts are embroidered in silver with a UMR Mathematics and Statistics logo, view logo below.



## Alumni News

**Tom Akers** (B.S. 1973, M.S. 1975) has received another campus Outstanding Teacher award and continues to serve on the NASA review panel for the next space shuttle mission.

**Van Brock** (B.S. 1963) is working in Indianapolis for Northrop Grumman as a Navy contractor on the V-22 Osprey tiltrotor aircraft.

**Mehmet** (Ph. D. 2002) and **Filiz** (Ph. D. 2002) **Dik** are teaching at Rockford College in Illinois after spending a year at University of Central Arkansas.

Kurt Caton (B.S. 1972) is Associate Manager in the AS/400 Planning & Operations Department of Great-West Life & Annuity in St. Louis. He and his wife Brenda are living in Waterloo, Illinois; their son Terry graduated from UMR with a degree in Computer Science last December and works for Boeing in St. Louis, and their daughter Amy and granddaughter Macie are living in South St. Louis County.

Pat Duvall (B.S. 1962) has made an early start on retirement, working two days a week and tutoring students in algebra and precalculus at South Seattle Community College. He has served for several years as the Washington State Director for the MSM-UMR Alumni Association, and tries to visit us whenever he comes to Rolla.

Paul Eloe (M.S. 1977, Ph. D. 1980), Chairman of the Department of Mathematics at the University of Dayton, organized a Special session on Analysis and Computation for Functional Differential Equations at the Spring AMS meeting in Bloomington, Indiana in April.

**Leon Hall** (B.S. 1969, M.S. 1971, Ph. D. 1974), Mathematics and Statistics Department Chair at UMR since 1998,

was elected this spring to a three year term on the Board of Governors of the Mathematical Association of America.

Professor Linda Hand (B.S 1982) of Missouri Southern State College is on sabbatical leave this year; she expects to spend part of the time in England, and expects to enjoy the opportunity of exploring several museums, including especially the British Museum, where they are displaying the recently cleaned Rosetta Stone (they found that the stone is actually pink, not black!) while there.



Work is proceeding rapidly on the construction of the new University Center building, which will be called the Havener Center in honor of **Gary Havener** (B.S. 1962). The building is on the site of the old infirmary on the corner of University Drive (which used to be called 14th street) and Bishop Avenue.

Elaine Hauschel (B.S. 1992) is enjoying the role of stay-at-home mom to Rachel, 4, and Adam, 2 1/2. Her husband **Dan** (B.S. in M. E. 1990) is senior Project Manager with Panhandle Energy in Houston, Texas.

Mike Hunter (B.S. 1999) received a Master's degree in Computer Science at the University of Illinois, Champaign-Urbana, and is now working at the University of California-Berkeley Communications and Network Services. He is still keeping touch with the UMR Solar Car Team and enjoying their success. Julie Sanders Luckerman (B.S. 1989) is now a stay-at-home mom to Alex,4, and Kate, 2. She says that "it's the most satisfying job I've ever had".

Marcel Maupin (M.S. 1978), Associate Professor at Oklahoma State University-Oklahoma City, was nominated for the Regents' Distinguished Teaching Award in November 2002.

**Denise Mausshardt** (B.S. 1983) is a stay-at-home-mom in Ballwin Missouri, where she is active with both the Cub Scouts and the Girl Scouts. She seems to have become the scouts' science adviser, thanks to her UMR training.

Lars Seme (M.S.1997) has been teaching at University of Arkansas-Fort Smith after spending the last four years on the faculty at Hendrix College. With a new baby, he plans to become a stayat-home-dad for a while.

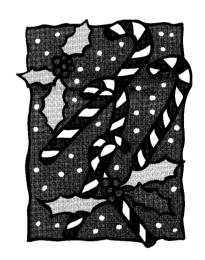
**Douglas Sept** (B.S.1994) and his wife Andrea have moved to Columbia, Missouri, where he is teaching algebra through AP calculus at Columbia Independent School.

Joseph Stahl (B.S. 1969) a member of the research staff of the Institute of Defense Analysis, lives in northern Virginia and has long had an interest in Civil War history. He has recently published an article in Gettysburg Magazine on the career of a private soldier from New Hampshire who survived the Battle of Gettysburg, only to succumb to disease while still on duty a year and a half later.

Andrea Vorwark (M.S.1994) and her husband Terry Hobbs wrote in early May that they had lost their home, in the Kansas City area, in a tornado. They were in the house, but escaped injury; fortunately, the loss was pretty well covered by insurance. Andrea said, "The windows came in before I got downstairs, but we were all safe in the

basement as the roof came off. We came up and the damage was far worse than we'd thought from the basement. Our house that we'd just bought in December was condemned."

"Now, we have stayed in a hotel for a few nights, and we have an apartment to stay in while we rebuild the house. Yes, on the same lot-the same house. I want to save the basement if we can. It saved my life, now I'll save it if I can." "That's where we are. Yes, we were on NPR, Good Morning America, TV9 and now Fox. They like the destruction in our area and Terry and I are very unemotional about it and let them in to film. We in no way enjoy talking to reporters, but they need someone, and we don't feel like it's a death. It's a little messy, but it's a rebirth of a new homewith nicer paper!"



Merry
Christmas
and Happy
New Year
to all.

## **Contributions**

Boeing/McDonnell Douglas
Foundation
DST Systems Inc.
Engelhard Corporation
Global SantaFe
Hewlett-Packard Company
IBM
Microsoft Corporation
Motorola Foundation
Novartis Corporation
Pfizer Incorporated
SBC Foundation
Sprint Foundation
USAA (United Services Auto Assoc)

## **Gifts**

Akers, Thomas D. '73 Allen, Mark Andrew '96 Alofs, Catherine Ann '90 Anderson, Dennis R '74 Andrzeiewski, Jennifer Ann '88 Babson, Gail Anne '84 Baird, Thomas B '63 Bartolo, Donald R '68 Becher, Steven John '96 Berendzen, Thomas A'68 Boberschmidt, Lawrence A '65 Bray, William O '76 Breig, William F '62 Bremer, Gary C '69 Brown, Curtis Allen '92 Brown, Harmon C '72 Bruening, James T '71 Buhrmester, Earl '72 Callahan, Susan L '78 Carter, Karen S '73 Caton, Kurt D '72 Christensen, Grant Allen '92 Coers, Alvin E '70 Coleman, Earl J '88 Crabtree, Thomas F '68 Davis, Kevin Thomas '86 Diggins, Sally Andrea '85 Dorrell, Edward W '68 Duvall, Henry Pat '62 Edson, Barbara '64

Edwards, Shawn David '92 Estes, Larry E '69 Faoro, Robert B '63 Fogle, David R '71 Folta, Peggy Ann '83 Ford, Raymond F '70 Garner, Jennifer A Gerlt, Lori J '89 Grice, John V '78 Guffey, James Michael '85 Haas, Douglas James '94 Haas, Gerald N '62 Haddock, A. Glen Hager, Harold W '70 Haile, Brian Douglas '91 Hall, Leon '74 Hand, Linda Marie '82 Hankins, J C '76 Hauschel, Elaine Margaret '92 Hawkins, Larry O '73 Hegemann, Victor J '74 Hess. James L '73 Hillebrandt, William A '72 Huff, Michael Lee '82 Hunter, Amy L Jamison, James L '65 Jayawardhana, Ananda A '98 Jones, Keith Norman '84 Jones, Leon R '73 Jones, Rana Elaine '87 Kadane, Jon P '87 Kieffer, John C '67 Killinger, J. Curtis '73 King, Sherry L '97 Kline, Bradford J '88 Kos, Martha A '74 Kubicek, John D '75 Kuhlmann, Dietrich W '90 Lee, Chin-Ming '70 Leitterman, Pamela A '75 Lindesmith, Stanley Benson '90 Luckerman, Julie Sanders '89 Mann, Gary L '68 Mathis, Stephanie Deanne '00 Maupin, Marcel A '78 Mausshardt, Denise A '83 McKee, Rhonda Louise '84 Moppins, Brandi M '97 Motsoasele, Motlatsi Neill, James W '73 Oakes, Janet R '75 Oster, Teri Lynn '84 Ott. Richard C '96 Parsons, Kenneth C '74 Poepsel, Margaret M '74 Porter, David Bryan '88 Record, Ralph T '64

Reiman, Paul Whitney '83 Reiter, Nancy L '82 Rice. Donald Keith '69 Richards, James L '76 Riggs, Donna B '94 Riggs, John R '67 Rooks, Joseph L '73 Saliga, Linda Marie '89 Sallas, William M '75 Schirer, Ivan J '70 Seme, Lars K '97 Sept, Douglas M '94 Sherrick, Sherman W '68 St Clair, Daniel C '75 Stair, George W '62 Stansfield, John Joseph '85 Stokes, Brenda Kay '87 Thein, Kim E '89 Tichenor, Dolores M '76 Wagener, Marian R '71 Walker, Lois J '76 Warfield, Melissa S '88 Wells, Curtis L '70 White, Jeremy G '93 Williams, John L '77 Wilson, Douglas E '89 Wineinger, Adam L '94 Wineinger, Shelly A '94 Wist, Patricia S '74

### Thank you







Dr. Tom Akers Outstanding Teacher Award Dr. Akers has won this award four years in a row.



Dr. Steve Clark Outstanding Teacher Award



Dr. Vy Le Outstanding Teacher Award



Dr. Tom Ingram Missouri MAA Section Distinguished College or University Teaching of Mathematics

WAI IO GO



Emily Rueck Outstanding Teaching Assistant Award.

# Let us hear from you

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Name	Years attending UMR
Current activities/interests	
Family	