Greetings!

In this issue we celebrate our twin commitments to teaching and research. Many of you may have had Associate Professor Joel Maruniak as your instructor in either Introductory Biology or Animal Physiology. Joel received the campus' William Kemper Fellowship for Teaching Excellence last year, the third biological sciences faculty member so honored. For those of you not fortunate enough to have Joel in your classroom, his essay on his teaching philosophy (page 2) provides a true measure of the man.

Professor Kathleen Newton was the recipient of last year's Chancellor's Award for Outstanding Research in the Biological Sciences (page 4). In addition to developing her own outstanding research program, Kathy served three years as director of graduate studies in the division, and she has been a mentor for countless undergraduates who completed independent research projects in her laboratory.

Two of Kathy's mentees, Amy Lawton and Frank Baker, are highlighted in separate articles in this issue. Amy was one of the first MU undergraduates to participate in the MU-European Community Science Study Abroad Program (page 4). She had a wonderful year at the University of East Anglia in Great Britain and has been an outstanding spokesperson for the program upon her return. Amy has been accepted in the doctoral program in genetics at North Carolina State University for fall 1997.

Frank Baker was one of the first two recipients of the Zimmering Prize in Biology (page 8). This prize is funded by an endowment established through the generosity of Professor Stanley Zimmering, an emeritus Professor of Biology and Medicine at Brown University and a 1953 recipient of a PhD in Genetics from MU. Frank Baker's undergraduate research project resulted in a publication in Mydica. He is currently working on his doctoral degree in plant biology with an emphasis on molecular biology at the University of California–Berkeley.

As always, we close with news from your fellow alums. We are, of course, totally dependent on you to keep us informed of your activities. Please take a minute to fill out the enclosed self-addressed, postage-paid card, or if you prefer, write us a letter c/o Alumni News, 105 Tucker Hall, Columbia, Mo. 65211.

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**Biological Sciences Alumni News**

**Summer 1997**

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**Cover illustration:** Amy Lawton takes time out from her studies during her year in London. See story on page four.
Newton receives Chancellor’s Award

Professor Kathleen Newton was described by one referee as “an international leader in her field… (who) has developed a unique and outstanding genetic system that has already made many important contributions to the field and promises to do so for many years to come.” Another said, “she has attained a degree of respect among the organelle community as a whole that few plant molecular biologists have ever attained.” And a third concluded, “Kathy is in the top seven to eight researchers worldwide who work on the molecular biology of higher plant mitochondria.” MU recognized Kathy’s international stature by naming her the recipient of the Chancellor’s Award for Outstanding Research in the Biological Sciences.

Kathy established her world-class research program by daring to be different. She developed a unique experimental system to study the interaction of mitochondrial and nuclear genomes in maize (corn). By analyzing a set of maize mitochondrial mutants — the nonchromosomal stripe (NCS) mutants — Kathy established the importance of mitochondrial function to normal plant survival. At the molecular level, two of the NCS mutants disrupt genes coding for ribosomal proteins, and two others affect components of the mitochondrial electron transport chain. Surprisingly, the latter two mutants also upset chloroplast biogenesis and function. Thus, they exposed a hitherto unrecognized link between the energy-generating machinery of the mitochondria and the photosynthetic apparatus of the chloroplast. Most important, this class of mutants represents the only avenue to continue to explore this crucial inter-organelar interaction.

Kathy built upon this impressive system of mutants to probe mitochondrial function in plants by developing a whole new tool, a mitochondrial transformation system. The ability to transform mitochondria represents an extremely important breakthrough for the field, opening up a whole new array of questions in mitochondrial molecular biology and genetic engineering in plants.

Kathy’s research is funded by three major grants, from the National Science Foundation, Department of Energy and U.S. Department of Agriculture. She has been continuously funded by the NSF since 1984 and was an NSF Presidential Young Investigator from 1988–93.

Kathy was promoted to professor last year. One of the external evaluators of her credentials offered the following concluding comment: “Setting aside all of the tangible stuff, what impresses me most about Kathy is her drive, her sense of purpose and her dedication to her chosen profession. In these days of receding budgets, retrenchment and other kinds of uncertainty, Kathy maintains her original drive and sense of curiosity, her concern about young people and whether ‘our’ generation is holding up our end and passing on the enthusiasm that we received from the past generation of plant scientists. These are the traits that I admire the most and which I believe are the most important in a person charged with training future scientists.”
Each nomination for the William T. Kemper Fellowship for Teaching Excellence must be accompanied by a statement by the nominee outlining his teaching philosophy. The following excerpts from Associate Professor Joel Maruniak's statement describe his conversion from a "lecturer" to a "teacher."

Two philosophical underpinnings guide my approach to teaching. First, I consider college students to be at a vulnerable and impressionable stage of development. I have a solemn obligation to them and to their parents to do the best I can to convey not only the content of my courses, but to teach them new ways to think. Second, I believe that what I do greatly influences how my students perceive their experience here. If they like and prosper from their interactions with me, they will become goodwill ambassadors for MU. Many will also become influential members of our society and voters of this state; their parents already are.

For me, teaching is a very personal endeavor. Over the course of a semester I develop a special relationship and bond with my class. The students learn quickly that I care about them, and I feel this knowledge is important in that it facilitates learning. One of the ways that they say that I show I care is that I learn most of their names. In reality, my strategy is simply to actively learn the names of those who speak in class so that I can recognize them by name when they raise their hands. This past semester that amounted to 41 out of 75 students. Learning the students' names is one of the first steps in forming the close tie that I come to feel with each of my classes. It is also heartening to see a student's face light up when I greet him or her by name out on campus.

My approach to teaching has evolved so that it is now very different from what it was when I began ten years ago. For many years it was important for me to think that I was dazzling the students with my intellect and knowledge. I also thought that it was very important to cover as much of the spectrum of physiology as possible, in as much detail as possible, so that the students would learn a lot. In time I began to have doubts about these approaches as I learned, discouragingly, that my very best students — those that became TAs for the next year's class — were not able to remember all that much of what I had taught them. This prompted me to begin asking questions about my goals and methods in teaching. If my best students weren't remembering that much of the material, then what was my teaching accomplishing? What should it be accomplishing?

This initial soul-searching led me to take my first steps down the road that would lead to radical changes in my teaching goals and methods. After a few small successful steps, I began moving in an accelerated fashion toward using as much interactive learning as possible in my teaching. It turned out that I already had some facilitory habits and predilections in place. One of these was that I am a shameless purloiner of the ideas and methods of others. For example, early on I learned from Bob Breitenbach, with whom I began team-teaching physiology, the value of telling physiology stories. I loved to listen to his stories, and now as often as possible, I tell physiology stories, including some of his, that relate to the material I am presenting. Along the way I learned that stories provide much more than entertainment value. I discovered the power of anecdotal memory when I found that my students were able to repeat verbatim material about which I had told a story.

I have also found that the physiology stories I tell about myself and my family help to bring the students closer to me. They laugh with me when I tell them about my visit to the Student Health Center when I was in college and thought that something was drastically wrong with my heart. It turned out to be benign pre-ventricular contractions brought on by late-night partying. The story serves as a lead-in to ectopic pacemakers in the heart and the Frank-Starling law. They hear the poignancy of my recollection of the birth of our first child and my concern as I watched her initial paroxysmal breaths. I tell them that it wasn't until a few years later, when I began teaching physiology, that I learned that it was normal and necessary for the first breaths to be very powerful because the infant is inflating its lungs for the first time. This allows me to begin talking about the changes in the circulatory and pulmonary systems that accompany birth.

Another predilection that I feel has helped me to become a better teacher is that I am a risk taker in the classroom. This has been important because some of the innovative methods I have tried have failed to work in my classes. Fortunately most of them do work well.

In one of the first Teaching Renewal Workshops, I watched Ted Tarkow demonstrate how he used cartoons, headlines and advertisements as effective takeoffs for discussion of a topic in his Classics course. I loved the idea and eventually found a way to use it in my course. For every major subject I cover, I continually gather appropriate clippings from scientific journals, local newspapers,
The New York Times, The Wall Street Journal and my favorite, National Geographic. I use this material to show how physiology pervades our lives and deaths, shapes human cultures, dictates our taste for sweet and salty foods, and shapes our medical system. I use articles to create problem-solving situations for the students. A reading taken from National Geographic titled, “The Spell of the Trobriand Islands,” mentions several times the importance of yams as a staple food in the lives and culture of Trobrianders and that the annual yam harvest is a festival lasting a month or more during which the...

When they have finished, I read a letter sent in to the next issue by a physician from Venezuela stating that the yam was long known and used by Mexican Indians for its contraceptive effect. He goes on to say that in 1939 an American chemist identified diosgenin, a progesterone-like substance in yams. From this grew Organon, a leading producer of oral contraceptives which still uses the yam as its source for diosgenin. I congratulate the class on its insights.

This yam example points up one of my most important current goals: teaching students critical thinking, problem-solving and hypothesis development skills. All of these depend upon setting up successful interactive learning situations in the classroom. My strategy for engendering daily interactive learning is to challenge the class to figure out as many things as I think they can, rather than simply giving them everything in lecture format. I try to pause an average of every 15 or 20 minutes during a lecture to ask a question or pose a problem related to something I am teaching. For example, I might ask a question like, “Why do you think the spinal cord is shorter than the vertebral column? You have already been given the background information that should allow you to develop a plausible hypothesis.”

Or, “Can anyone think of a possible cure for sickle cell anemia, based on the information we have covered in today’s class?” I sometimes let the whole class solve the problem by calling on individuals who raise their hands; at other times I let them work in their groups. What is remarkable to me is that the class as a whole becomes a group of outstanding theorists and problem-solvers. I no longer am concerned about covering all areas of physiology in complete detail. What the students are now learning is much more important for their futures than volume or detail. I wasn’t sure before I began this kind of teaching whether it was possible for someone to learn these skills, but now there’s no question about it in my mind.

Interactive learning has provided me with the means to do important, unique and intellectually challenging teaching in my classes. I have heard some of my colleagues voice concern about the role of faculty in the age of computer-based instruction. I do not worry about this for a millisecond. Neither computers nor books will ever be able to teach students to think like scientists. Nor can they get to know students, be a cheerleader for them, a counselor, adviser, role model, philosopher, prodder or letter-of-recommendation writer for them. I can’t imagine ever getting tired of teaching. Every class is different and challenging. There is a whole new set of friends to make, interact with, teach the facts and concepts of physiology and introduce to new ways of thinking about the world.
Science Study Abroad
Drawing Record Numbers of Undergraduates
by Nancy Moen

A record number of science students are taking advantage of the MU/European Community Science Study Abroad Program. The seven science students abroad this year include four from the biological sciences division, two in biochemistry and one in chemical engineering.

Science students, who have typically been underrepresented in Mizzou’s study abroad program, are joining the program in higher numbers as they learn about its benefits from returning science students such as Amy Lawton.

Like many international students, Lawton wanted to experience cultural diversity in her studies but needed to stay on track with her science curriculum to keep her graduation date in sight. The European Community exchange gave her that assurance.

“When you get there,” she says, “if you’re a biology student, you study biology.” “It’s all geared on learning to think like a scientist and has more emphasis on science application than on general knowledge.”

International Programs Director John Heyl attributes some of the increased interest in science study abroad to scholarship aid contributed by the biological sciences division. Chair John David committed $1,000 for this year’s students. Added to scholarship assistance from the program, each student will receive $1,000 to $1,400 toward their expenses. “This is the first time for a departmental commitment such as this,” Heyl says.

Lawton, a fourth-year student majoring in biological sciences, attended the University of East Anglia in Great Britain during the 1994–1995 academic year. She selected that university because of its ties to her interests in food and plant science research.

While in Great Britain, Lawton discovered some important differences in the two schools. At Mizzou, she had completed an undergraduate research internship the previous summer, working on a maize mitochondria project with Professor Kathleen Newton. Even with that experience, she couldn’t work on research projects in East Anglia because of that university’s insurance restrictions; however, all her science classes did include lab components.

She also noticed differences in the student–professor interaction. “I found students there didn’t ask as many questions as I was used to,” she says. “I think American students tend to be more concerned about how to answer questions and what’s required of them. We focus more on getting our grades because we have more evaluations.”

She is highly complimentary of the science exchange. “This is an excellent program. It gives you a good chance to figure out who you are and how you relate to other people.”

Following her study abroad, Lawton considers herself more confident and self-reliant, and a little more outspoken. She says her new communication skills will serve her well in her science research career.

Her comments are typical of returning students according to Erik Rowlett, study abroad assistant. Their good experience and word-of-mouth advertising have contributed to the growing interest in science study abroad.

In addition to East Anglia, science students may select from the universities of Madrid, Stuttgart and Parma, Italy. Those going to Germany, Italy and Spain must meet minimum language proficiency requirements.
Because the program is tailored for science students, Mizzou's participants don’t lose any time in working toward their degree and all credits transfer to the Columbia campus. “Our students can get humanistic studies there and not miss out on biology or physics courses to fulfill requirements,” Rowlett says. “For example, in Madrid they can study Moorish conquests of Spain, which isn’t taught here, but they will get MU history credit for it.”

In an award-winning essay on her experiences at the University of East Anglia, another MU biological sciences student, Nancy Hein, wrote: “Each day I awoke to a new adventure that taught me a little bit more about myself, and a whole lot more about the world around me. It was a refreshing feeling to be in an environment that felt not only so new, but so different.” For students still hesitating, Nancy has the following advice: “People and places from my year abroad have made a profound impact on my life, an impact that would never have happened if I had not gathered the courage to allow change in my life to occur. Change is difficult, but a very healthy thing for everyone to experience... It is an experience of a lifetime that will change you only for the better.”

MU Opens a Curation and Conservation Center

A new 23,000 square foot state-of-the-art curation center opened last summer on the site of an old rock quarry just south of Stadium Boulevard. This natural history center holds over 175,000 plant specimens in the Dunn-Palmer Herbarium, as well as over 50 million anthropology and archaeology artifacts.

The oldest public herbarium west of the Mississippi, the Dunn-Palmer specializes in lupines and Missouri flora, with specimens and gifts from herbaria in Mexico, Colombia, Ecuador, Brazil, Argentina and Venezuela, as well as all over North America and Europe. Curator Robin Kennedy’s current research in northwestern Ecuador has resulted in exciting acquisitions from a region new to the Dunn-Palmer collection.

The Herbarium is used by plant taxonomy students, students and faculty from other departments at the University, as well as field personnel from the Missouri Division of Natural Resources, the Missouri Department of Conservation and the U.S. Army Corps of Engineers. The move from Tucker Hall to the new Curation/Conservation Center almost tripled the available space, providing both room for the botanical collections to grow in coming years and updated research facilities for scholars who use the Dunn-Palmer collection.

The Curation/Conservation Center was constructed in large part with a $1 million grant from the U.S. Army Corps of Engineers to Michael O’Brien, professor and director of the Museum of Anthropology. Natural landscaping will eventually tie the building to themes of natural history and Missouri’s heritage. Instead of a clipped and manicured lawn, the grounds will be planted with wildflowers and native prairie grasses, such as buffalo grass and little bluestem.
Passing the Torch

The division’s senior botanist has retired. **Professor Billy G. Cumbie** was honored at a campuswide reception last May at the Reynolds Alumni Center attended by several hundred friends and former students and colleagues. Billy, his wife, two of his three children and one of his three grandchildren, were later feted at a dinner at the Peking Restaurant hosted by his colleagues in the Division. Billy’s granddaughter helped him try out his retirement gift — an MU captain’s chair — for size. Billy’s 35 years of service to MU are commemorated by a memorial plaque in the faculty arboretum on the east side of Tucker Hall.

Billy arrived at MU in 1961, having taught briefly at Texas Tech University in Lubbock after earning his PhD from the University of Texas. As a new associate professor, he set up his office and laboratory in the basement of Lefèvre Hall, and began teaching Plant Anatomy, Plant Microtechnique, Plant Morphogenesis, Morphology of Vascular Plants and Morphology of Algae and Fungi. Later he taught General Botany and General Biology, along with numerous special readings courses for individual students.

Billy was the chairman of the department of botany from 1968 through 1970, during the time the new Tucker Hall was being built. By the time the botany faculty moved into Tucker Hall in January 1970, the merger forming the division of biological sciences was under way.

Nine MA and three PhD students earned their degrees in plant anatomy under Billy’s calm and careful tutelage. Fortunately for the students of tomorrow, he will continue to teach Plant Anatomy once a year while spending time catching up on his research and writing in his office and laboratory in 409 Tucker Hall. Billy’s e-mail address is cumbie@biosci.mbp.missouri.edu. He would welcome a hello from any of his former students.

We are delighted to welcome **Assistant Professor Emmanuel Liscum** to MU. Mannie received his BS in cell biology from the State University of New York at Plattsburgh and his PhD in plant biology from Ohio State University. As a graduate student, Mannie studied the blue light photosensory systems in plants, demonstrating the existence of multiple blue light sensory systems and providing the first evidence for a distinct photoreceptor absorbing in the ultraviolet region of the spectrum.

As a postdoctoral fellow at the Carnegie Institution of Washington, Mannie initiated a hunt for mutants of *Arabidopsis thaliana* which were defective in the phototropic response. One class of mutants he isolated is both defective in the phototropic response and has dramatically reduced levels of a phosphorylated protein involved in all phototropic responses in *Arabidopsis*. Mannie isolated and partially characterized mutants of *Arabidopsis* that identify a total of five distinct genes involved in the phototropic response.

When Mannie joined us last spring he immediately initiated a project to clone the genes he had identified and characterize their gene products. These studies should provide a wealth of information about the signal perception/transduction and regulatory mechanisms involved in the phototropic responses of higher plants, and provide clues about signalling events mediating other light-regulated or light-dependent responses.

Mannie is teaching Developmental Biology and will offer a graduate course in the cellular mechanisms of plant responses to environmental cues.
Science and science fiction mix in Heidi Stallman’s world. The 27-year-old Columbia native is a scientist by training and an aspiring writer, whose dream of publishing a novel is a little closer to reality.

Stallman won third place in the L. Ron Hubbard Writers of the Future contest for a short story she wrote last year. In addition to a $500 cash prize and an all-expenses paid trip to the contest’s award ceremony, Stallman’s piece will be published in an anthology of all the contest winners’ essays.

Stallman said she has been writing sporadically since she was a child. “I never saw it as a practical goal,” she said. “I used to write as a kid. I kept a journal, but then I stopped writing when I was twelve or thirteen.”

She didn’t start again until she was a senior at MU. “I was so excited by it — and terrified by it — that I didn’t write again for four years.” By then, Stallman had received her bachelor’s degree in biology from MU and was studying for a master’s degree in animal ecology at Iowa State University in Ames. She attended a writer’s workshop in Ames and wrote The Winds, which captured the prize and will be her first published short story.

“It is a big deal in the science fiction community,” Stallman said. “It will really open doors. They really look after their winners. I feel like this is a step in the right direction, like I’m finally arriving at a dream, moving toward publishing a novel.”

The Winds takes place 30 to 50 years in the future at a time when the United States is experiencing a fuel crisis. The U.S. government is rationing fuel and will not distribute it to rural areas. The story revolves around an older woman who lives on a farm in Iowa and refuses to leave despite lack of fuel and considerable pressure from authorities.

Stallman’s essay was one of several thousand entries, according to Bev Widder of Dateline Communications, which organizes the contest. The contest was started 13 years ago by L. Ron Hubbard to help young, unknown science fiction and fantasy writers get started in the field.

Stallman said she likes writing speculative fiction — fiction which is grounded in science — and enjoys integrating ecological and spiritual ideas. “We have no idea what the future is going to be like,” she said. “We can do whatever we want; it allows so much creativity. Fantasy elements, spirituality and magic are all important elements of society and people. It is the human element of the story that I am most interested in; how people react and live.”

Stallman attributes part of her success to her study of tae kwon do, in which she is a first-degree black belt. She said the martial art combines physical and mental training, and through that, she learned about herself.

“I have learned self-confidence, leadership and public speaking,” she said. “My master instructor taught me about the indomitable spirit and perseverance. When you get a lot of rejections, perseverance comes into play. I was taught to believe that anything you want and work hard enough for you’ll get.”

Stallman said her degree, which combines theoretical ecology and wildlife biology, enhances her writing. “I see myself as a naturalist,” she said. “Whenever I write things about nature, what I know goes into my writing. I won’t just say there is a tree, I will be descriptive about what kind of tree it is.”

For now, Stallman hopes to pursue field research positions that will allow her work for a period of time and also have time for writing. Eventually, however, Stallman wants to write full time. When that time comes, she said she’ll probably end up settling in Columbia.

Excerpt from The Winds

“Harlan told me once if you listen to the winds just right, you’ll hear their stories. On a warm spring day they’re the songs of birds wooing a mate and the promise of flowers to come. Summer winds whisper of children playing and cool running streams, and in the fall, they’re a chorus of thanksgiving for the harvest, a dance of leaves to celebrate the year’s end. But it’s the winter wind that really speaks to you. On a cold winters’ night, the winds move endlessly through you becoming the voices of every one you have ever known or loved, calling you home.

I am haunted by winds.”

This article first appeared in the September 12, 1996, Columbia Missourian
Zimmering Prize
Honors Outstanding Seniors
by Nancy Moen

Alumnus Stanley Zimmering has established an $11,000 endowment, the Stanley Zimmering and Jonathan Marc Zimmering Endowed Fund, providing funds for prizes to outstanding seniors in biological sciences and engineering.

The Professor Stanley Zimmering Prize in Biology will be awarded annually to a graduating senior who plans an academic career in research and teaching, and who has been accepted into a PhD program in genetics/molecular biology at a university outside the University of Missouri system.

Zimmering, an emeritus professor of biology and medicine at Brown University in Providence, R.I., earned his doctorate in genetics at Mizzou in 1953.

In announcing the awards and the first two winners, division Chair John David said, “We thank Professor Zimmering for the exceptional generosity that allowed us to make the initial award of this prize to graduates Nathan Bivens and Frank Baker. The endowment will allow us to continue to offer similar awards to outstanding undergraduates each year.”

Bivens is a PhD student in plant molecular biology at the University of Illinois, and Baker is a PhD candidate in plant biology with a molecular biology emphasis at the University of California–Berkeley. Both received a cash award of $250 and a certificate of honor.

Bivens completed his senior honors research project at MU with Assistant Professor Tobias Baskin. He presented his research at the annual meeting of the American Society for Plant Physiologists and published a paper in *Planta*.

Baker’s senior honors research project was with Associate Professor Kathleen Newton. He presented his research at the national Maize Genetics Conference and published a paper in *Maydica*.

In addition to the biology award, Zimmering created the Jonathan Marc Zimmering Memorial Prize in Engineering, which is directed to an outstanding MU graduating senior in electrical engineering. The prize honors Zimmering’s deceased son, who earned his bachelor’s degree in engineering at Brown University. Candidates for the engineering prize must be graduating seniors seeking an academic career in research and teaching and must be accepted into another university’s PhD program.

Zimmering endowed similar programs at Brown University, Brooklyn College, where he received his bachelor’s degree, and the University of Massachusetts.

During his professional career, Zimmering held numerous prestigious positions nationally and is the author of 102 refereed publications and invited reviews in radiation genetics, genetics of chromosome behavior and genetic toxicology. His research was supported principally from the National Institutes of Health.

He continues to serve as a consultant to the *Drosophila* genetics group at the Instituto Nacional de Investigaciones Nucleares (National Nuclear Institute) of Mexico as external assessor of graduate students in that institute and as a member of the editorial board of the Spanish-English international journal, *Contaminacion Ambiental*, dealing with environmental problems.

Zimmering has returned to Mizzou only once since earning his degree. Traveling across the country with his wife, the former Dorothy Davis, J ’46, MEd ’51, and his three children in 1979, he made a detour to visit Columbia and “savor again the delights of the splendid chocolate milkshakes served at Columbia Dairy.”

To the family’s chagrin, the dairy outlet no longer existed near campus, but Zimmering says it was a pleasure to “drive through the campus and relive fond memories.”

Frank Baker

Nathan Bivens

Professor Stanley Zimmering

Biological Sciences Alumni News
Help keep your fellow alumni informed. 
Please fill out this page and mail it back to us.

Name ____________________________________________

Address __________________________________________

__________________________________________________

Degrees & dates ______________________________________

Department(s) ______________________________________

I continued my education at...

Institution(s) ________________________________________

Degree(s) and dates ________________________________

Department(s) ______________________________________

I accepted employment in the private sector/academia...

Company/institution(s) ________________________________

Department/division(s) ________________________________

Position(s) _________________________________________

Dates ________________________________

I received awards/honors ...

____________________________________________________

____________________________________________________

I have done these other interesting things ...

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____________________________________________________

____________________________________________________

Please fold so return address shows, tape shut and mail.
The most frequent suggestion for future issues of Alumni News is "tell us more about our fellow alumni." We'd love to. Of course, we're dependent on each of you to keep us informed. Please take a minute to write us and tell us anything and everything you'd like about either yourself or one of your fellow alums: weddings, children, new jobs, promotions, awards, articles or books, retirement, special achievements, or special events. This page folds into a self-addressed, prepaid postcard. If you'd like to send a letter, address it to...

Alumni News
105 Tucker Hall
University of Missouri–Columbia
Columbia, Mo. 65211-7400
1930s
Elizabeth W. French (MS, zoology and botany, 1939) taught in the St. Louis public schools for 20 years. She reads books for "talking tapes" and helped in the Laubach Literacy Program. She enjoys traveling, reading and gardening.

1940s
Glenn W. Todd (AB, botany, 1949; MA, botany, 1950; PhD, botany, 1952) was an assistant biochemist at the University of California–Riverside Citrus Experiment Station until 1958 when he moved to Oklahoma State University in Stillwater. Glenn retired as professor of biological sciences in 1994 after serving as head of the department of botany, the department of botany and microbiology, and director of the school of biological sciences. He edited the Proceedings of the Oklahoma Academy of Science from 1979–89, when he received the Academy’s Outstanding Service Award. Glenn was a Fulbright professor at Cairo State University and Azerbaijan State University. He moved to Richardson, Texas in 1994.

1950s
Berel L. Abrams (AB, zoology, 1952; BS, zoology, 1954; MD, University of Louisville, 1956) retired from private practice in January 1996. He was a clinical professor of surgery and director of the teaching program at Jewish Hospital from 1980–95. Berel just returned from a trip to Israel and Africa and intends to spend time with his four children and 10 grandchildren.

1960s
Richard Reimer (AB, zoology, 1962) has spent 30 years in continuing medical education at three medical schools and a private regional medical center. He is currently program coordinator in the office of continuing medical education at Duke University Medical Center.

Ronald W. Antoine (AB, zoology, 1964; DDS, Washington University Dental School, 1969) is in private practice in St. Louis. Ron is a fellow of the Academy of General Dentistry. He was part of a medical/dental mission to Brazil which treated people along the Amazon River. He enjoys fishing in Missouri and Arkansas, as well as for king salmon in Alaska and peacock bass in Brazil.

Joseph (Marty) Sholders (AB, zoology, 1966; MD, 1970) is board certified in psychiatry and child psychiatry. He is in private practice in Napa, Calif., and has been medical director of Aldea Inc. since 1993. Marty and his wife, Christine, have been married 23 years and have two teenage children. He is an amateur wine and beer maker and coaches kids’ sports.

Sam Young (AB, zoology, 1966; MD, 1970) is a physician in private practice in Champaign/Urbana with a clinical appointment at the University of Illinois Medical Center. Sam and his wife attended the division’s alumni picnic last fall.

Nancy Eileen Olson (AB, zoology, 1969; MJ, 1970; MS, 1975, PhD, 1984 in clinical pathology) is in her sixth year as laboratory director of the University of Missouri Student Health Center in Columbia. The laboratory is now CLIA, HCFA and AAAHC certified. Nancy was an assistant professor of medical laboratory technology at Central Methodist College and managed the clinical laboratory and taught at the vet school. She plays volleyball in a women’s league and has an 8-year-old Lhasa Apso that has her trained.

1970s
Leland D. Loose (PhD, biology, 1970) is senior associate director of clinical research for Pfizer Inc.

Karen Schaeffer Meldrum (AB, biology, 1970; MS, conservation biology, University of Missouri–St. Louis, 1995) is hard at work on her second musical tape/CD which will mostly focus on social and ecological issues.

James L. Fletcher, Jr. (AB, zoology, 1971) was honored to be selected to participate as a physician at the 1996 Olympic games in Atlanta. Jim is a board certified family physician in Cape Girardeau, Mo., with a special interest in sports medicine.

Lawrence Judy (BS, honors in zoology, 1972; MD, Vanderbilt University, 1977) is practicing internal medicine with the Welborn Clinic, a multispecialty group practice in Evansville, Ind. Lawrence was president of the Welborn Baptist Memorial Hospital medical staff in 1992. He backpacked into the Bob Marshall Wilderness to see the Chinese Wall in July 1995 and rode a bicycle for his first century race that same year.

John DeMott (BA, zoology, 1975; MA, biology, 1978) is finishing his 17th year as a research instructor in ear/nose/throat at Washington University Medical School. He has been funded by the National Institutes of Health for that whole period, and just received another four-year grant renewal.

Clare McCluggage (AB, biology, 1978; MD, 1982) completed her residency in family practice at the University of Texas Southwestern Medical School in Dallas. She liked it so much that she stayed there as an assistant professor in family practice and community medicine. Clare is residency program director and cofacilitates a group of first year medical students in Introduction to Clinical Medicine, Southwestern’s first foray into problem based learning.
**1980s**

Catherine Alice Fox (BA, biology, 1982; MS, oceanography, Texas A&M University, 1985) is an environmental scientist with the Environmental Protection Agency’s Office of Water Quality Enforcement and Compliance Assurance. She has received the EPA’s bronze medal and the Environmental Management Scientists’ Fellowship Award and is a columnist for several journals at John Wiley & Sons. Catherine married Paul Fahey in 1995. Their first son, Sean Fox Fahey, was born in March 1996.

Theresa Maria Reynolds Hartner (BA, biology, 1982) is a medical research technologist in ophthalmology at Washington University Medical School working on her MS in biology at the University of Missouri–St. Louis.

Donald K. Scott (AB, biology, 1982; MA, biology, 1990; PhD, cell and molecular biology, St. Louis University, 1991) is a postdoctoral fellow in molecular physiology and biophysics at Vanderbilt University.

Amy Slagle (BA, biology, 1984; MD, 1991) completed her residency in family practice at the University of Wisconsin in 1994. She is currently a staff physician at the Menominee Tribal Clinic. The Menominee Nation is a large, rural Indian reservation in northeast Wisconsin.

Melody Blakeley Savae (AB, microbiology, 1986) was a research associate in regulatory biology at the Salk Institute and the transgenic and animal modeling coordinator on an Alzheimer’s project with Athena Neurosciences. She is now a territory sales manager for Life Technologies Inc. Melody competes annually in the World Outrigger Canoe Sprint Championships with a crew from Sacramento, Calif.

Gary Albers (BS, biology, 1988; M. Divinity, Vanderbilt, 1993) is an ordained minister at the United Methodist Church in Owatonna, Minn. He co-chaired the Minnesota Conference Commission on the Status & Role of Women and leads training events on clergy sexual ethics. Gary ran a shelter for the homeless in St. Louis before entering the seminary.

Margaret Bauer (MA, biology, 1988; PhD, medical microbiology & immunology, University of Wisconsin, 1996) is a postdoctoral fellow in infectious diseases at the Indiana University School of Medicine.

Anne M. Joseph (Adams) Walsh (BS, biology, 1988; BS, cytotechnology, 1989) is the senior cytotechnologist in the department of pathology at the University of California–Irvine Medical Center. Anne married George Walsh June 14, 1996. Anne is vice president/president-elect of the Los Angeles chapter of the California Association of Cytotechnologists and chair of the annual state workshop/seminar. Anne is also a volunteer wish granter for the Make-A-Wish Foundation of Orange County.

Marcia Bray (AB, biology, 1989; Doctor of Optometry, University of Missouri–St. Louis, 1994) is in private practice as a member of Melanie Crandall & Associates optometrists and pediatric ophthalmologists in Kansas City.

Gene R. Kidd (AB, biology, 1989; MD, 1993) is completing her ophthalmology residency at the University of North Carolina.

**1990s**

Linda Foerst Potts (BS, biology, 1992) received her PhD in cell biology and anatomy from the University of North Carolina in May 1996. Linda married Kevin Potts (BA, 1991; MD, Duke University, 1995) and is an instructor in anatomy and physiology in the Queen’s College biology department.

Beth Kent (BS, biology, 1993) is a PhD student at the University of Minnesota. She just received a highly competitive Howard Hughes Medical Institute Predoctoral Fellowship.

Joy Morrison (BS, biology, 1993) is completing her doctor of osteopathic medicine at the University of Health Sciences–College of Osteopathic Medicine. She provides physicals to the underprivileged, tutors youth at the Kansas City Community Center and provides health care for the homeless at the City Union Mission. Joy is a member of Sigma Sigma Phi (national osteopathic honorary) and received the top grade in neuroanatomy in her class.


Jon Baltzell (AB, biology, 1994; BS, human development and family studies, 1994) will finish physician assistant school at the Bowman Gray School of Medicine, Wake Forest University in August 1997. In his spare time, he has taken up tae kwon do, mountain biking and whitewater rafting.

Christopher L. Nenninger (AB, biology, 1994) is a certified clinical laboratory scientist at St. Louis Children’s Hospital. Christopher was a defensive linemen on the 1989 and 1990 MU football teams and a member of Delta Sigma Phi.

Kara Nichols (AB, biology/political science, 1994) received her law degree from Case Western Reserve University Law School. Kara is editor of Health Matrix: Journal of Law-Medicine and lives in Shaker Heights, Ohio.

Lisa Richard Turner (BS, biology, 1994) is an analytical lab technician in high performance liquid chromatography at Kansas City Analytical Services. Lisa has turbochrome operator certification and is G.L.P. trained and certified. Her husband of two years is studying radiology.

Jennifer Hanslick (BS, biology, 1995; AB, interdisciplinary studies, 1995) is a part-time student at Washington University and a research assistant in psychiatry at the Washington University School of Medicine as she prepares for medical school. Jennifer married David Papp in August.

Nicholas (Nick) Toepke (AB, biology, 1995) is a second-year student at the MU School of Veterinary Medicine. Nick and his fiancee, a second-year student in the MU Law School, attended the division’s alumni picnic last fall.
In Memoriam

Edward M. Palmquist, retired professor of botany and associate dean of arts & science died at his home in Palm Bay, Fla., April 21, 1996, at age 89. He is survived by two sons and a daughter.

After completing his doctorate in botany at Cornell University, Dr. Palmquist taught at Cornell and McGill universities before moving to MU. A nationally-known botanist, Dr. Palmquist was a fellow of the American Academy for the Advancement of Science, a program director for the National Science Foundation and chair of the physiology section of the Botanical Society of America.

Dr. Palmquist was an accomplished calligrapher and singer, touring with the Cornell Glee Club and serving as president of the Society for the Preservation and Encouragement of Barber Shop Quartet Singing in Columbia.