Across the globe, technological progress continues at an exponentially fast pace. Using the latest technologies, MU Extension continually works to find more effective and efficient ways to develop and deliver research-based educational programs to enhance the success and well-being of individuals and families, businesses and public-sector organizations throughout Missouri.

In FY 2009, MU Extension launched a redesigned Web site that reflects extensive research on information architecture, interface design, usability and customer-centric delivery. Analysis showed that nearly 5.5 million unique visitors annually came to the former site, primarily viewing guides and other online publications.

One goal of the redesign was to increase awareness of MU Extension’s programs and services located throughout Missouri’s 114 counties. To accomplish this objective, user-friendly categories organize news, programs and services alongside publications. Now, each time Missouri users visit a publication, they become aware that MU Extension has specialists, offices and related programs in their communities.

The new online face of MU Extension is “Missouri’s one-stop source for practical education on almost everything.” MU Extension’s redesigned Web site reveals research-based answers to online visitors seeking information on wide-ranging topics, including agriculture, natural resources, lawn and garden, home and consumer life, nutrition and health, families and relationships, community and leadership, business and careers, and emergency management.

In tandem with the Web site launch, MU Extension’s media relations activities with newspapers and print outlets and radio and television broadcasters led to an estimated 140 million viewer and listener impressions during FY 2009. Many of those came from video and audio news and feature stories that local and statewide media downloaded and then localized for their audiences.

MU Extension participates in today’s converged media landscape by offering TV news stories and footage to local and regional stations in their preferred formats, whether digital or traditional video. Newspapers and radio stations also can download digital versions of produced video and still visuals for use on their Web sites. During FY 2009, MU Extension provided digital video file transfer training for media outlets that once required hard copies of video files to create news stories. The switch resulted in a net savings of more than $15,000 annually in distribution costs.

Missourians and other interested viewers worldwide now can watch a large library of news clips either at the MU Extension Web site or through the globally known YouTube online broadcasting site.

In addition to developing general-interest news coverage, MU Extension produces live, interactive and asynchronous video “webinars” that allow Missouri firefighters and first responders to take advantage of valuable training from the MU Fire and Rescue Training Institute without having to travel. Web-based streaming videos on nutrition and food safety, as well as topics for 4-H youth projects, are used in classrooms and communities across the state.

The Missouri TeleCenter Network offers another seamless portal through which the four UM System campuses and partner institutions and organizations can reach out with programming and educational opportunities. During FY 2009, the network served more than 13,000 individuals, including those enrolled in 1,862 credit courses and noncredit programs, as well as provided public-access computers and hosted events such as videoconferences.

During FY 2009, MU Extension also tested two software tools that improved in-house efficiencies. Office Communicator 5 allowed field staff and county offices to stretch their budgets through a computer-based platform for sending instant messages, sharing files and even talking in real time to other employees without using local or long-distance telephone service. A trial of Adobe Acrobat Connect meeting software indicated that voice quality and server access and response times are superior to the previous interface while providing users with a more professional meeting experience, virtually.
When tough times strike, University of Missouri Extension steps up to the challenge; this past year, Missourians dealt with an unstable economy that left people without jobs and some without homes. Businesses cut back on employment and production. Local governments were stretched to the limit following much-reduced tax revenues. Natural disasters, including a massive ice storm in Southeast Missouri, plus floods and high winds in other regions, left paths of destruction.

Through all these situations, MU Extension educational programs connected those in need with resources to help. MU Extension faculty and staff helped create jobs through business counseling and agri-business development; strengthened families through personal finance programs; encouraged youth through entrepreneurship projects; added value to communities through visionary planning and leadership development; and improved people’s quality of life while enhancing the state’s economy.

A study by the MU Community Policy Analysis Center shows that for every dollar invested in Extension programs, the state enjoys a $27 return. Business development programs increase tax revenues. Families, who learn to manage chronic diseases and live healthier lives, save on future medical expenses. Young people involved in 4-H programs choose to go to college rather than drop out of school and increase their lifetime earnings.

Education shines a light for people dealing with difficult times, and it is a light that MU Extension has been shining for almost a century. During FY 2009, MU Extension faculty recorded more than 1 million contacts with customers. Our continuing education programs attracted an additional 106,000 registrants from within the state and around the world.

In keeping with our theme of highlighting a different part of the state each year, this annual report incorporates program highlights from St. Louis and surrounding East Central Region counties. I hope you enjoy the regional spotlights (pages 30-31), and learn about our many programs that benefit Missourians in every corner of the state and from every walk of life.

Thank you for your support of MU Extension. We look forward to our continuing relationship with you and our partners across the state.
This year's annual report features MU Extension's East Central Region. From rich farmland to historical cityscape, the East Central Region represents some of the state's greatest geographic and cultural diversity. The variety of extension programming throughout the region reflects that diversity and contributes significantly to wide-ranging economic activities across Missouri. Read more about this region on page 30.

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Community Development

Marc Linit, PhD, associate dean, and Mary Simon Leuci, EdD, program director and assistant dean, College of Agriculture, Food and Natural Resources

extension.missouri.edu/cd

Since 2005, ExCEED’s work in Missouri’s 11 regions has garnered nearly $1.12 million in community endowments and grants, $235 million in new business investments and 12,826 hours of volunteer work valued at $220,488.

MU Extension’s Community Development Program touches the lives of Missourians where they live. By providing leadership development and enhanced decision-making skills at the local level, the program helps build inclusive communities and promote economic development statewide. The effort also assists with community-wide emergency preparedness and recovery. In FY 2009, volunteers and program partners contributed more than 24,988 hours valued at $443,964.

Also during FY 2009, the MU Extension Community Economic and Entrepreneurial Development program, or ExCEED, leveraged $609,080 in community endowments and grants, with new business investments accounting for $12.2 million. From those investments, 60 new businesses launched, including 23 youth-owned start-ups; nine businesses expanded, resulting in 60 new jobs and 16 being retained; 19 new business leaders emerged; and new networks developed statewide.

Emergency management efforts directly supported communities throughout the state in planning and recovery from severe storms as well as the initial outbreak of H1N1 flu. Information also was distributed through print and broadcast media and the Web. One local MU Extension center helped coordinate volunteers who provided more than 13,000 hours of service for chain saw teams, debris removal, wellness checks, and shelter and mass feeding operations. Many participants in the year’s 11 faith-based workshops developed family emergency plans. Eighty-five percent of participants said their congregations were more prepared for disasters because of actions taken by leaders who used MU Extension resources.

By facilitating planning with communities and nonprofits, the Community Development Program helps them lay the groundwork to obtain state and federal grants and other resources. Statewide, small nonprofit organizations partnering with the program leveraged more than $2.5 million in resources during the year. Over the past two years, Herculaneum and Hillsboro obtained more than $10 million in grants to implement their community plans.

In FY 2009, the U.S. Department of Agriculture’s Rural Development office used the socioeconomic benefit assessment system created by the MU Extension program’s Community Policy Analysis Center to assess and monitor its business and industry loans and grants across the country. Work by the Office of Social and Economic Data Analysis contributed to the awarding of a $9.9 million federal grant to the Missouri Department of Elementary and Secondary Education.

MU Extension worked with the Community Action Network to conduct issue forums across the state on closing the achievement gap. These events increased capacity for public dialogue, resulting in the collaborative development of an action brief used by participants to advocate for local and state policy change.
In FY 2009, the Osher Lifelong Learning Institute cast a net beyond the doors of its mid-Missouri facility to reach a wider audience of adult learners. Efforts included interactive television broadcasts and face-to-face classes in a residential retirement community and seniors’ club.

As the first program of its kind based at a Missouri public educational institution, the Osher Lifelong Learning Institute at MU provides opportunities to individuals age 50 and up statewide for continuing intellectual and cultural stimulation, interpersonal interaction, group participation and the sense of being an active player in society.

FY 2009 brought about increased understanding of the dynamics introduced by the technological revolution. Educational institutions no longer need wait for students to appear on their doorsteps. Instead, the hallmark of this year’s effort was taking education to students’ backyards.

The institute continues to serve as a resource for the state’s underserved, seasoned adult population residing in rural areas, as well as meeting the needs of central Missouri’s more concentrated population. As the equivalent of a mini-college with 2,387 students, the MU Extension program offered 160 events, including 58 courses, 67 educational films, 30 instructional brown-bag seminars and five educational tours during FY 2009.

Each year, the institute leads with educators recruited from the University to provide quality, reputable educational efforts that reflect MU Extension’s charge to bring research-based information and education to Missourians. Despite the economic downturn in FY 2009, with lower-than-expected enrollments due to potential students’ concerns about outliving their retirement funds and other investment accounts, the institute established significant new collaborative relationships.

To create a clearer sense of its purpose, the institute assigned FY 2009 courses into categories. Half of the offerings addressed either specific skills such as gardening or practical knowledge participants could expect to acquire such as estate planning. In contrast, a third of courses engaged students in history, literature and subjects in the arts to stimulate deeper cognition and reflection. Another important function of the program is to keep aging citizens informed about the continuously changing society and world we inhabit, and nearly 20 percent of OLLI courses take on that role. In all, the program provided 896 hours of instruction to Missourians, with 89,002 total contact hours across the state.

New computer equipment in the training labs for local students, as well as the installation of digital polycoms, higher-lumen LCD projectors and considerably improved lighting and sound, contributed to the institute’s success during FY 2009.
MU Extension’s Business Development Program each year provides research-based education and technical assistance to thousands of Missouri business owners to help them improve the competitiveness and success of their small businesses.

Last year, the program assisted 15,181 Missourians through individualized business counseling or training. Statewide, the economic benefit from these projects included $211.1 million in increased sales, 2,433 new jobs, $105 million in new financing for client businesses and $434 million in government contracts.

Enthusiasm and positive energy are the trademarks of Marion Hayes III. After many years of dreaming about having his own business, Hayes founded St. Louis-based BRK Electrical Contractors in 2003. Counselors at the St. Louis regional office of the Missouri Small Business and Technology Development Centers were integral to a 12-month planning process before Hayes opened the doors to his three-person shop, which now employs 23 people.

The center’s staff took a team approach to help Hayes achieve his small-business goals, using a combination of counseling in strategic planning, marketing, debt structuring and management. His firm’s ensuing growth is reflected in solid revenues. BRK Electrical’s first-year sales reached an impressive $1.2 million; by 2008, revenues topped $5 million. Despite the overwhelming success he’s found in independent business ownership, Hayes says he still relies on his SBTDC team for solid advice about planning and implementing new strategies.

Business Development Program

Steve Wyatt, JD, program director and associate dean, College of Engineering

Business Development impact by the numbers

The MU Extension Business Development Program provides comprehensive services to assist clients in acquiring capital for business start-up, expansion, technology transfer and innovation. In the past year, the program helped Missouri entrepreneurs and business owners to:

- start 192 new businesses.
- create 2,433 new and retain 1,123 existing Missouri jobs.
- increase sales valued at more than $211 million.
- acquire more than $105 million in new financing for their companies.
- win more than 2,034 government contracts that total some $434 million.
- pursue research and development investment efforts — with technology clients receiving more than $9.8 million in grants and other funding to support product commercialization.
Missouri thrives on its diverse natural and human resources, as well as a sophisticated business base, on which it builds a progressive agricultural and state economy. Agriculture and Natural Resources Extension continues to focus efforts on enhancing economic viability, protecting Missouri’s environment and natural resources, and improving quality of life.

Especially in rural Missouri, the health of future economies and quality of life will depend on developing a new viable agricultural business economy that promotes value-added production models and alternatives while improving the business skills of those in the industry.

An example of this is Annie’s Project — a multi-state extension program that promotes professional skills in women who operate or manage farms and on-farm businesses. During FY 2009, MU Extension’s Annie Project provided 18 hours of training to local farm women on financial, marketing, legal, human resources topics, as well as understanding production risk management and how to develop business plans specific to individual farm needs.

Missourians are committed to protecting the state’s environment and natural resources. Since 2005, MU Extension has assisted citizen groups in developing management plans for 26 watersheds, with three of the groups securing $1.4 million in funding to implement their plans last year. At the same time, landowners participating in the Missouri Woodland Steward program prepared 270 forest stewardship plans representing 50,130 acres statewide and having an estimated economic impact of $41 million. Similarly, landowners who took part in MU Extension’s Master Wildlifer program developed and implemented wildlife habitat plans on approximately 30,566 acres.

Missouri’s livestock and crop producers continue to look to MU Extension for answers to efficiency and productivity questions involving research, science and technology. Following are some examples of the economic successes MU Extension programs have helped those producers to create throughout the state.

Ninety percent of producers plan to adopt the pasture management practices they...
learned while attending MU Extension grazing schools. The MO-PORK feeding program resulted in an economic benefit of more than $1.6 million for Missouri pork producers.

The Show-Me Replacement Heifers program’s economic impact on rural Missouri the past 12 years has exceeded $40 million. The addition of 6,000 pasture-based dairy cows during FY 2009 has generated more than $10 million in direct sales and $31.2 million in total economic impact.

Adoption of MU Extension’s tall fescue toxicosis management practices by half of Missouri cattle producers will result in an additional $30 million in profits.

In FY 2009, Master Gardeners contributed 127,663 volunteer hours, with an estimated impact on their communities of nearly $2.6 million. Simeon Wright, coordinator of MU Extension’s Plant Disease Clinic, instructs participants in a rose workshop, held at the Bradford Research and Extension Center. Wright assists with the Master Gardener program through his teaching of workshops and short courses.

Engineering Continuing Education

Mary A. Myers, PhD, director

Engineering Continuing Education entered its second year of service in FY 2009. Its primary mission is to provide the engineering community with innovative educational programs that are built on the synergistic union of the College of Engineering and MU Extension.

Last year, the college offered its first online undergraduate engineering course. Twenty-four students from five states completed the circuits course. Scored assessments show significantly enhanced learning compared to historical values for this class. Evaluations also demonstrate high, as well as growing, interest in the online delivery of engineering courses.

For the past two years, Pollution Prevention (P2) Boot Camp was offered through MU Direct to seniors and graduate students. This one-week intersession course focuses on methods, applied engineering and tools to reduce or eliminate waste at its source. While eight students completed the class during its first year, the course was filled to its capacity of 18 the second year. P2 strengthens economic competitiveness by teaching efficiency related to the use of raw materials, energy, water and natural resources. The training is a first step in any sustainable, renewable energy plan before wind and/or solar power is considered.

Students in the course also may be selected as Mizzou P2 interns, receiving a 10-week paid industrial position in which to apply their training. In summer 2008, three interns were placed in three top Missouri companies and implemented P2 programs that saved more than $260,000. Six interns worked at two Missouri companies in summer 2009, with substantial savings once again anticipated.

At the graduate level, efforts continue to further develop the master of engineering degree for practicing professionals as an alternative to the existing classroom-based master of science in engineering options, which are research-oriented. Time constraints often make traditional classes difficult to attend, preventing many engineers from continuing their education. The new degree will be a flexible 36-hour online program, with no thesis required. Instructors of core courses will teach performance excellence, as defined by the nationally recognized Baldridge criteria.
Changes in global technology are fueling the worldwide demand for trained scientists and engineers at an exceedingly faster pace each year. In the United States, this need cuts across communities, professions and skill levels as a broader understanding of technology and science increasingly is required by more Americans. Future scientists are especially crucial to Missouri, where three-quarters of the state’s $12.1 billion in products and services exported during 2008 were from science-, engineering- and technology-based industries.

Interest in science often is a predictor for students to choose science-related careers, and 4-H members report an increased interest in science at a rate three times that of their non-4-H peers. In FY 2009, 4-H exposed 306,862 Missouri youths and 13,463 adults to projects related to science, engineering and technology.

In 2008, 4-H youth development specialists and other MU Extension personnel worked with volunteers and community leaders to plan, implement and evaluate local programs that reached 94,230 Missouri youths — one in 10 children — ages 5 to 18. Findings from a recent national study bring an important message to parents, community leaders and educators: Active 4-H members excel in leadership and have higher educational goals, exhibiting fewer unhealthy behaviors such as drinking, smoking and other forms of drug use.

The 4-H Study of Positive Youth Development gathered information from thousands of adolescents, not just 4-H members, nationwide. Missouri joined the study in 2007. Since then, 502 Missouri youths, grades six through 12, have been surveyed. As a result, researchers and youth development specialists know more about the kinds of experiences and support that young people need to be healthy and thrive.

There are significant differences between active, twice-monthly 4-H participants and those not involved with the organization. In particular, teens who actively participate in 4-H during high school report more leadership experiences and expect to attend college at a higher rate; their tendencies toward unhealthy behaviors also greatly are reduced over those of their peers.

In FY 2009, Missouri 4-H enrolled 11,232 volunteers. These volunteers donate an average of six to 10 hours each week, which equates to 72 to 120 hours each year. Assigning value for a volunteer’s time at $17.76 per hour, Missouri 4-H volunteers provide $14 million to $24 million in services annually.
Whether dealing with asset development, housing, health care, or personal and family relationships, HES Extension offers educational programs, information and resources that give Missourians tools for better living.

Human Environmental Sciences Extension develops educational programs that improve the quality of life for more than 280,000 Missourians each year. Through face-to-face contacts, the Internet, interactive television and other technology outlets, as well as the mainstream media, the program addresses statewide needs in financial education; design of living and working environments; family development; community support systems; and nutrition, health and physical activity improvement.

During the job losses and other recession-related challenges that millions faced throughout FY 2009, the program’s faculty members focused their efforts on providing education to empower Missourians to make informed decisions — from managing household money issues and personal financial planning to undertaking home repairs, improving nutrition and strengthening relationships.

Through the financial education program, participants studied techniques for saving, borrowing and responsible spending to gain more control over and improve their financial health. Educated consumers help build safer and more self-reliant communities, reducing predatory lending, reliance on public assistance programs and crime.

In FY 2009, nearly 1,000 participants in the Healthy Homes initiative learned how to remove radon, mold, lead, carbon monoxide and other hazards from their residences. Removing one toxin from a family’s living environment saves $187 per year in medical expenses. The program has saved Missouri consumers an estimated $42,000 in medical expenses.

Stay Strong, Stay Healthy encourages Missourians to increase their physical activity. Changing sedentary behavior reduces an individual’s risk of falls, heart disease and osteoporosis; decreases measurable stress; and improves weight control and overall quality of life. In older participants, these new health benefits decrease the likelihood of entering a nursing home, which cost an average of $24,455 per individual in FY 2009.

The fallout from tough economic times often puts additional strain on personal relationships among families. Participants in the relationship education program discovered ways to strengthen their relationships despite the professional, financial and health challenges they may have faced throughout the past year, thereby decreasing their likelihood of divorce by 50 percent. Missouri saved an average of $30,000 for every couple that remained married in FY 2009.
When internationally known billionaire, philanthropist and petroleum industry visionary T. Boone Pickens comes around to give advice, people take notice. At the first-ever Missouri Energy Summit, held in April, that meant more than 1,600 business entrepreneurs, researchers and venture capitalists, as well as federal and state agency representatives, gathered in Columbia to discuss current and future development efforts in energy, alternative fuel sources, power, storage, infrastructure and enabling technologies.

The summit was one of more than 73 conferences, meetings, special events and workshops that the MU Conference Office delivered to 23,468 participants across Missouri, in surrounding states and around the world throughout FY 2009.

For more than 45 years, the office has served as a full-service planning and management center for educational experiences that help fulfill the University’s charge as a land-grant institution to disseminate information to Missourians. The office also provides expertise and service for noncredit programs, including on-campus events that draw high school — and prospective Mizzou — students and other visitors to Columbia.

During FY 2009, the office collaborated to deliver conferences that generated $4.3 million in gross revenue.

The office’s diverse clientele includes state and federal agencies, private industry, not-for-profits, faith-based groups, and youth and athletic associations, as well as University academic and administrative departments. They benefit from a comprehensive array of services, from starting the list of possible registrants to finishing the fiscal reconciliation. During FY 2009, the office collaborated with the University of Missouri System, three of its campuses and eight MU colleges and schools, 14 administrative units, seven federal and state agencies, and 18 associations and other groups to deliver 73 conferences that generated $4.3 million in gross revenue.

More than 1,600 people attended the UM System-sponsored Energy Summit in April. The MU Conference Office organized the two-day event, which brought together business, research and government interests to discuss research in energy management, development and consumption. T. Boone Pickens, left, addressed the conference on the MU campus. Conference attendees had a close-up view of solar panels outside Jesse Hall, right.

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* Student FTE = Student Full-time Equivalent
The University of Missouri Concert Series and KBIA-FM, MU’s National Public Radio affiliate, inform, engage and entertain audiences and listeners in Columbia and the surrounding region. The concert series attracts and educates patrons of the arts through scheduled live performances and year-round outreach activities, and KBIA creates and delivers programming that nurtures curiosity, dialogue, knowledge sharing, diverse opinions and lifelong learning within its listener audience.

Concert series artists are selected for the high caliber of artistry, creativity and diversity they can bring to mid-Missouri. Performers often combine traditional artistic activities with the inspiration of new and imaginative endeavors that make for world-class cultural events. During FY 2009, the series adopted new methods of scheduling performances, and options that provide better customer service through ticket exchanges. The addition of matinees encouraged audience attendance as well.

In FY 2009, KBIA reached more than 300,000 listeners across the 19 mid-Missouri counties it serves, as well as listeners across the globe with 72 hours of digitally streamed daily programming via KBIA-FM, KBIA2 and KBIA3. Funding from the federal Public Telecommunication Facility Program made it possible for KBIA to begin building a new repeater station in Mexico, Mo., that will expand Audrain County coverage by October 2010.

KBIA continues to be an early adapter of other multi-platform media technology, including podcasting and video-on-demand, or “vodcasting,” as well as Twitter® and Facebook® posts. KBIA staff members produced a webcast audio feed of 2008 presidential election coverage in cooperation with the School of Journalism’s Reynolds Journalism Institute.

KBIA’s news department is an award-winning team that in FY 2009 received:
• five regional Edward R. Murrow awards, including two by student reporters;
• one national award (and swept all nine regional audio awards) in the Society of Professional Journalists’ competition;
• two Public Radio News Director awards in student competition; and
• one Missouri Broadcasters Association award and a certificate of merit.

Some of the many other highlights from the year included spearheading the Economy Project, a collaborative audio- and Web-based project with NPR stations throughout Missouri, and increasing annual donations more than 30 percent.
Today, more than ever before, society faces challenges that require talented, educated individuals to help create stronger economies worldwide. MU Direct: Continuing and Distance Education is dedicated to making such educational opportunities accessible, flexible, relevant and convenient for adults of all ages seeking new paths to meet their potentials — wherever they live and work.

The average student in MU's online degree and certificate programs is 36 years old. Some students live in remote areas with no access to classroom-based higher education offerings, and most work weekdays, making traditional educational programs out of the question for them. Nontraditional students typically have children, spouses and/or parents requiring their time and help. Many students enrolling in MU Direct partner programs already are well-educated, holding down full-time jobs that call for a growing knowledge base or changing skill sets.

Furthering their education allows teachers, nurses and other professionals to stay competitive, earn promotions and, in uncertain economic times, potentially maintain their current employment.

MU Direct offers solutions that fit a spectrum of educational needs, currently with 43 undergraduate and graduate degree options and 15 certificate programs available online, and one degree program offered in the evening. Through these programs, 2,664 Missouri adults in 109 counties, as well as students nationally and internationally, pursued bachelor's and master's degrees and graduate certificates in FY 2009 from the University's colleges of Arts and Science; Agriculture, Food and Natural Resources; Education; Human Environmental Sciences; and schools of Nursing, Health Professions, Medicine (health management and informatics) and Journalism.

MU Direct partnered with these academic units to garner 8,704 enrollments in 666 courses for a total of 24,681 semester credit hours — an increase of more than 18 percent in enrollments over the prior year.

Student support services play an important role in student retention and success. Because nontraditional students often have not been in the educational system for an extended period, they may be nervous about returning to school or taking classes online. MU Direct helps them register for online courses, access unfamiliar technologies and navigate University administrative processes.

In FY 2009, more than 474 students earned their bachelor's or master's degrees.
Keeping Missouri nurses up-to-date with the knowledge and skills they need to effectively provide care and fully participate in the state’s health-care efforts is a primary goal for Nursing Outreach.

Nurses in Missouri and surrounding states benefit from a variety of face-to-face, Web-based and interactive TV educational offerings. In FY 2009, the program brought more than 56 continuing education programs to nurses from 99 of Missouri’s 114 counties and the city of St. Louis.

Nursing Outreach partners with several organizations to provide cooperative programs and serves as the Sinclair School of Nursing’s primary outreach effort. During five decades, the fully accredited, state-approved office has provided affordable and accessible professional continuing education opportunities to Missouri’s registered nurses.

In July 2008, the program graduated its first 30 nurses from the MU Leadership Development Academy for Registered Nurses in Long Term Care, retaining 91 percent of its initial class for the entire nine-month program. Another 33 graduated in May 2009. With a combination of face-to-face meetings and interactive TV sessions, participants gathered one day each month — and in online discussion groups — to deliberate their nurse leader roles in transforming nursing home care and its culture.

Technology has come on as strong medicine for Missouri’s outlying areas, where nursing shortages are prevalent and educational and professional networking opportunities scarce. In cooperation with the Missouri Department of Health and Senior Services, Nursing Outreach recently released a free continuing education course titled the Management of the Adult With Diabetes, offered as a Web-based module and in CD format. The course, in development for more than a year, took less than 36 hours to attract more than 100 enrollments once it went online.

More than 1,867 nurses and other health-care providers attended Nursing Outreach’s educational programs during FY 2009, and another 1,194 nurses earned professional continuing education credit by attending conferences, activities and events offered in co-sponsorship with the MU School of Medicine.

During FY 2009, RNs from 15 St. Louis nursing homes met eight times via MU Extension’s Telecenter Network to participate in the second year of the MU Leadership Development Academy for Registered Nurses in Long Term Care. In addition to offering the federally funded academy, the program received $245,467 in competitive external grants and contracts during the year.

“The Leadership Academy was a lifeline ... everything I needed to do my job better. I now have a savings account of experience I can tap when needed.” — Mary Beth Weeks, director of nursing, The Baptist Home, Chillicothe

Nursing Outreach hosted the National Professional Nurse Educators Conference in October 2008 at the Intercontinental Hotel in Kansas City, in cooperation with the University of Kansas.
During FY 2009, the office’s faculty interacted with more than 1,900 professionals at 43 producer and veterinary educational events sponsored by MU Extension and other interested organizations throughout Missouri.

MU Extension’s veterinary medical program develops continuing education and outreach efforts in partnership with extension specialists, University faculty and researchers. Together, they bring together large- and small-animal veterinarians and allied industries with the livestock producers, companion animal owners and other members of the public they serve. The program tackled issues facing the livestock industry and small-animal veterinary practices in Missouri and surrounding states through continuing education workshops, animal science course lectures, industry-sponsored seminars and on-site farm visits.

New for FY 2009, the Commercial Agriculture Stocker/Backgrounder Institute addressed current health, nutrition, economic and technology management topics pertaining to stocker/backgrounder cattle operations. More than 65 farmers and veterinarians attended the one-day conference in Harrisonville.

The program also provided support for dairy producers by publishing the Missouri Dairy Reproduction Manual and continued work with intensive-grazing dairy operations in Southwest Missouri. Faculty also dealt with consumer concerns by building awareness and improving understanding of farmers’ efforts in animal care and safe food production through the Missouri Beef Quality Assurance program.

To meet rising food demands resulting in increased livestock production, the American Veterinary Medical Association predicts that as many as 13 percent more food-supply veterinarians will be needed to serve the agricultural industry by 2016. Every year, the shortfall grows by 5 percent due to retirements and fewer graduating veterinarians going into food-animal medicine.

In FY 2009, the veterinary medical program conducted a survey of more than 540 Missouri cattle farms and ranches, showing that, of the 81 percent using veterinary services in the past year, nearly one-fifth had problems obtaining those services for their operations. Respondents indicated the most common difficulty they experienced was a significant delay in getting a veterinarian to come to the farm. This was due to the high demand for veterinary services but dwindling number of rural veterinarians available to provide the needed services. More than half of those surveyed believed the problem will worsen during the next decade. Respondents recommended financial incentives for veterinarians to locate in rural areas and scholarship programs for veterinary students to specialize in health care for cattle.

The results of this study were used by the Missouri Department of Agriculture during its efforts to secure funds from the Missouri General Assembly for the agency’s Large Animal Veterinary Student Loan Program.
Teaching those who protect and serve all Missourians is the primary goal of the Law Enforcement Training Institute, which in its 61st year served more than 800 students — from 68 Missouri counties, as well as 32 other states and Washington, D.C. Faculty, attorneys and other state-certified professionals provide basic pre-service and specialty in-service instruction, and recruits and veteran officers who graduate from the institute's programs go on to serve public safety agencies at the local, state and national levels, with many becoming certified to train others in their agencies.

In FY 2009, the institute hosted three basic academy classes that graduated 84 recruits. To keep up with demands and trends in public safety, the institute finished developing several training modules and began offering new continuing education courses on topics that include drug identification for school resource officers, administrative and regulatory updates for professionals, writing skills for supervisors, racial profiling for instructors and online national cruelty investigations schools for animal welfare officers.

Offering the first and largest of only two face-to-face animal cruelty programs of their kind in the country, the institute held 12 National Cruelty Investigation Schools in eight states during FY 2009, with a total of 240 students participating. With high-profile cases and national coverage of animal abuse and neglect becoming more prevalent in the mainstream media, public awareness of such welfare issues is growing quickly. Record enrollments in the schools reflect the increased demand from animal welfare professionals and activists, police officers, court personnel and citizens for these programs.

Each year since 2002, the Law Enforcement Training Institute has provided the Montgomery City Police Department with weekly in-service training over the course of a month. In FY 2009, eight officers were trained in Missouri statutory law and racial profiling awareness to hone communication skills used frequently during vehicle stops.
The successful management of a fire or other emergency incident is directly related to how well emergency responders perform at the scene. That level of performance, which can mean the difference between life and death, is a direct reflection on their training.

In FY 2009, MU Extension’s Fire and Rescue Training Institute provided comprehensive continuing professional education and training to 1,224 fire service and emergency response personnel from St. Louis County.

In FY 2009, MU Extension’s Fire and Rescue Training Institute provided more than 22,000 fire service and emergency response registrants with continuing education and professional training to save lives and protect their property from fire and other disasters. The institute also has a direct impact on the well-being and protection of Missouri’s 25,000 firefighters — 80 percent of whom are volunteers — and the 5.8 million citizens they serve statewide.

Known for making training accessible, the MU program prepares its students to deal not only with fires, but also with medical emergencies, hazardous materials response and acts of terrorism.

Focusing efforts to provide quality, standards-based education, the institute’s comprehensive training also includes structural, wildland and aircraft firefighting; technical rescue; other environmental emergency services; fire service instructor and company officer development; emergency management; and emergency planning and exercise evaluation.

During FY 2009, the institute conducted 881 continuing professional education courses, providing 257,713 student instructional hours of training to 22,047 fire and emergency service responders and students. Participants from 113 Missouri counties and 44 other states registered for hands-on courses held in 86 counties across the state.

In the winter and spring of 2008-2009, Missouri faced a multitude of regional and statewide disasters. As part of the county-level and state emergency responses, MU Extension’s Community Emergency Management Program provided information and technical assistance to county offices and local communities. The program assisted in the stabilization and clean-up of one state emergency and three presidentially declared disasters in FY 2009.
CDIS offers a range of courses for independent learners to enroll in year-round — regardless of location and at all academic levels, from elementary to graduate level.

The Center for Distance and Independent Study extends the University’s instructional resources and programs throughout Missouri, across the United States and in 51 other countries. CDIS serves the increasing number of students who require quality and affordable online options with maximum flexibility while pursuing their educational goals. In FY 2009, the center enrolled 20,801 students worldwide.

In FY 2009, university-level enrollments grew by 6 percent, up to 3,277. Initiatives to enhance the online bachelor of general studies degree completion program — with increased student options for concentrations — attracted an additional 71 students. More than 20 students have graduated with a general studies major since 2006. New popular courses in psychology and business have contributed to a 30 percent increase in university enrollments during the past two years.

In collaboration with faculty, the CDIS curriculum team incorporated an array of innovative design features in 26 new courses, using customized interactive components designed to enhance learning. The team continues to research and apply high-quality instructional technologies appropriate for online course delivery.

MU High School attracts some of Missouri’s most gifted young scholars. Lisa Simone, of Fenton, Mo., needed a high school alternative program that would allow her to work around her dance interests, finish high school early, take advanced courses and work on an associate degree at the same time. MU High School fulfilled that need. She graduated from the school’s diploma program in June 2009. After earning her associate degree from St. Louis Community College, she received a Presidential Finalist Scholarship to study biomedical engineering at St. Louis University. Simone is a pianist, cellist and ballet dancer and has appeared in the Nutcracker with the St. Louis Ballet. (Photo by Gigi Weaver Photography)

A total of 14,623 enrollments were recorded at the secondary and elementary levels throughout FY 2009. The 78 graduates who were members of the class of 2009 brought the total to nearly 600 diplomas granted by MU High School since its inception in 1999. The high school received a University Continuing Education Association distance education meritorious course award for its online Personal Finance course, which allows students to fulfill Missouri’s new statewide graduation requirement in financial literacy.

High school students now can choose from among 15 Advanced Placement® courses, in addition to the array of other gifted-education courses. As an alternative to traditional independent study courses, 18 semester-based options are also available. Enrollments will be monitored to inform decision-making on future development of similar term-based courses.

For students who need assistance with writing, CDIS offers support services in collaboration with MU’s Online Writery. With 10 writing-intensive university courses in development, 49 designated courses with significant writing requirements soon will provide optional tutorial services.
Providing organizational and professional development assistance, MU Extension’s Missouri Training Institute reaches small businesses, industry, government agencies and educational organizations across the state. Housed in the Robert J. Trulaske Sr. College of Business, the institute also works in cooperation with the Missouri TeleCenter Network, the Missouri Small Business and Technology Development Centers, and Extension business development staff to offer continuing education and training directly to Missouri business owners.

In FY 2009, the institute continued to diversify its customer base and focus products and services on the varying needs of private businesses and public organizations. Faculty delivered 321 noncredit business education courses, which totaled more than 39,350 hours of instruction, to 7,338 participants across all Missouri counties.

In FY 2009, the Missouri Training Institute teamed up with MU Human Resources to create a training series for supervisors that, following a successful launch with the University’s three largest departments, will be available campus-wide within the next fiscal year.

By balancing work in the public sector with private-sector businesses and higher education, the institute has established relationships that produce repeat business. It serves those clients with a variety of training products, including the supervisory training series, human resources certification programs and the human resource development series for trainers.

Along with the College of Business and the Disney Institute, the institute sponsored a one-day Keys to Excellence event that attracted nearly 200 participants. The Missouri Department of Social Services worked with the institute to provide 130 days of staff preparation to fulfill supervisory training requirements.

Throughout the year, faculty offered two 12-week training programs to prepare HR professionals to take the exam required for certification through the Society for Human Resource Management. Graduates of the institute’s program passed the society’s exam at a rate of 98 percent, compared to the national average of about 57 percent.

Service to University departments also grew in FY 2009, including training for the staffs of the College of Business’ undergraduate advising and career services offices and the new supervisory training series — developed in partnership with MU Human Resources — provided to Campus Facilities, Campus Dining and Residential Life.
The Office of Continuing Medical Education provides educational programs that ultimately promote improved health for all patients. Efforts reach primary-care providers and other health-care practitioners across the state — especially rural, community-based physicians, and MU School of Medicine faculty and students, as well as providers nationwide and worldwide — joining professionals in supporting an international base of health-care education.

As a liaison between generalists and specialists in various fields of medicine and research, the office shares the latest medical procedures and techniques, including ways to meet the always-increasing standards of patient care implemented at the MU School of Medicine and University of Missouri Hospitals and Clinics. In FY 2009, the office provided continuing medical education to more than 20,000 health-care professionals throughout the state and across the world through 1,300-plus programs.

A critical component of the office’s mission is to benefit patients living in underserved rural areas. Educational programs are tailored to the needs of providers in those locations in particular.

Among the programs are outreach efforts delivered through the Missouri Telehealth Network. The office accredits grand rounds and similar teaching series within the School of Medicine as important means for faculty members, resident physicians and medical students to learn or stay current in their specialties. Allowing participants across the state to be taught directly via live broadcasts by instructors from multiple specialties, the network provides close-to-home continuing education that minimizes disruptions to their daily practices.

In addition, the office works with the MU Extension health education specialist to improve Missourians’ health literacy by implementing community-based chronic disease prevention and self-management techniques. In FY 2009, collaboration with regional extension specialists and organizations propelled the program to reach 1,213 Missourians through 124 Eat Well Be Well With Diabetes workshops. A pilot program also was developed to gauge and enhance Missourians’ ability to manage stress and improve healthy behaviors, including making nutrition a priority.
During FY 2009, America experienced one of the most severe economic crises since the Great Depression. Combined with rapid changes in the labor market, the recession dramatically expanded challenges facing industries’ leadership. Across Missouri, the MU Extension Labor Education Program reached out to leaders and members of organized labor by providing resources to help them overcome challenges in the workplace.

Since 1963, the program has worked with employee organizations across Missouri and beyond to ensure that workers and their leaders develop the skills necessary to serve as contributing members in their organizations, as effective representatives in the workplace, and as informed and active participants in their communities.

In FY 2009, the faculty conducted 44 programs with total participation of 1,252 people, including joint efforts within the construction industry to incorporate classes on organizational history and strategy into the program's apprenticeship curriculum. Throughout the year, classes were developed for apprentices in the sheet metal, plumbing, pipe fitter and sprinkler fitter crafts. These classes were taught in St. Louis and eight Missouri counties.

Traditional skills of leadership and representation remain important to union officers and other leaders, but today, labor education programming must adapt to two distinct trends. The first challenge is to reflect the unique challenges presented by the economic crisis. For example, traditional collective bargaining strategies and practices must be adjusted to reflect a joint employer-employee goal of mutual survival in severe economic times. Just as important is the need for unions to understand the strategic implications of permanent changes in the employment relationship. Global economic trends, the erosion of basic benefits and increasing levels of employment insecurity are challenges that affect long-term union strategy.

Activities in MU Extension’s Labor Education Program reflect these challenges, with greater emphasis on strategically analyzing industries in which Missouri workers are employed. Courses address issues relating to greater workforce diversity, expanded understanding of how global economic trends affect local employment conditions, and the increasing challenges to maintain essential elements of economic security. In FY 2009, members of 17 different national labor organizations participated in program courses to upgrade their representation skills.

Major programs in FY 2009 included the 11th annual Romeo Corbeil/Gilles Beauregard Summer Youth Camp, bringing together 20 young people from across the country to engage in an intensive living and learning experience, during which participants learn about the labor movement and issues confronting workers at home and internationally. The camp is sponsored by the Office and Professional Employees International Union, with considerable financial and other support from a variety of Missouri unions.

Labor Education Program staff also cooperated with other MU offices, including the Osher Lifelong Learning Institute, the Asian Affairs Center and the Center for Sustainable Energy, to develop and deliver content relevant to their missions.
**MU Extension statistical data**

### MU Extension FY 2009 Credit Course Offerings

<table>
<thead>
<tr>
<th>MU Direct: Continuing and Distance Education</th>
<th>Head Count</th>
<th>Number of Courses</th>
<th>Number of Enrollments</th>
<th>Credit SFTE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>College of Agriculture, Food and Natural Resources</td>
<td>22</td>
<td>136</td>
<td>139</td>
<td>180</td>
</tr>
<tr>
<td>College of Arts and Sciences</td>
<td>32</td>
<td>562</td>
<td>1,681</td>
<td>3</td>
</tr>
<tr>
<td>College of Business</td>
<td>5</td>
<td>127</td>
<td>378</td>
<td>3</td>
</tr>
<tr>
<td>College of Education</td>
<td>354</td>
<td>5,584</td>
<td>672</td>
<td>14,853</td>
</tr>
<tr>
<td>College of Engineering</td>
<td>7</td>
<td>13</td>
<td>9</td>
<td>28</td>
</tr>
<tr>
<td>College of Human Environmental Sciences</td>
<td>61</td>
<td>159</td>
<td>120</td>
<td>289</td>
</tr>
<tr>
<td>Graduate School</td>
<td>1</td>
<td>29</td>
<td>0</td>
<td>87</td>
</tr>
<tr>
<td>School of Health Professions</td>
<td>38</td>
<td>118</td>
<td>284</td>
<td>81</td>
</tr>
<tr>
<td>School of Journalism</td>
<td>28</td>
<td>280</td>
<td>0</td>
<td>747</td>
</tr>
<tr>
<td>School of Medicine (Health Management and Informatics)</td>
<td>26</td>
<td>343</td>
<td>0</td>
<td>1,029</td>
</tr>
<tr>
<td>School of Nursing</td>
<td>92</td>
<td>1,353</td>
<td>1,400</td>
<td>2,698</td>
</tr>
</tbody>
</table>

Subtotal of courses through MU Direct***: 3,629 666 8,704 4,683 19,998 195.1 1,067.4

<table>
<thead>
<tr>
<th>Center for Distance and Independent Study (CDIS)</th>
<th>Head Count</th>
<th>Number of Courses</th>
<th>Number of Enrollments</th>
<th>Credit SFTE*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>University level</strong></td>
<td>2,534</td>
<td>170</td>
<td>3,277</td>
<td>9,449</td>
</tr>
<tr>
<td><strong>Grande total of university level credit courses</strong></td>
<td>6,163</td>
<td>836</td>
<td>11,981</td>
<td>14,132</td>
</tr>
<tr>
<td><strong>CDIS high school level</strong></td>
<td>6,807</td>
<td>246</td>
<td>11,435</td>
<td></td>
</tr>
<tr>
<td><strong>CDIS elementary level</strong></td>
<td>1,105</td>
<td>65</td>
<td>3,188</td>
<td></td>
</tr>
</tbody>
</table>

Grand total of all credit courses: 14,075 1,147 26,604


* SFTE = Student full-time equivalent

** CDIS' MU High School awarded 78 diplomas and offered 5,717 high school units to 1,906 SFTE in FY 2009.

*** 329 MU In The Evening enrollments are included in the 2009 total for the appropriate school or college.

**MU Direct partnered with academic units to garner 8,704 enrollments in 666 courses for a total of 24,681 semester credit hours — an increase of more than 18 percent in enrollments over the prior year.**
**Summary of Continuing Education Noncredit Activities**

**FY 2009**

<table>
<thead>
<tr>
<th>Continuing Education Unit</th>
<th>Number of Activities</th>
<th>Attendance Total</th>
<th>Individual Hours of Instruction</th>
<th>Student FTE*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center for Distance and Independent Study</td>
<td>16</td>
<td>2,901</td>
<td>316</td>
<td>470</td>
</tr>
<tr>
<td>Continuing Medical Education</td>
<td>1,389</td>
<td>20,694</td>
<td>2,045</td>
<td>149.0</td>
</tr>
<tr>
<td>Fire and Rescue Training Institute</td>
<td>881</td>
<td>22,047</td>
<td>12,754</td>
<td>1,001.1</td>
</tr>
<tr>
<td>Labor Education</td>
<td>44</td>
<td>1,252</td>
<td>277</td>
<td>25.5</td>
</tr>
<tr>
<td>Law Enforcement Training Institute</td>
<td>50</td>
<td>821</td>
<td>3,072</td>
<td>237.0</td>
</tr>
<tr>
<td>Missouri Training Institute</td>
<td>321</td>
<td>7,338</td>
<td>1,575</td>
<td>131.8</td>
</tr>
<tr>
<td>MU Direct</td>
<td>14</td>
<td>100</td>
<td>392</td>
<td>10.0</td>
</tr>
<tr>
<td>Nursing Outreach</td>
<td>56</td>
<td>1,867</td>
<td>349</td>
<td>39.3</td>
</tr>
<tr>
<td>Osher Lifelong Learning Institute</td>
<td>160</td>
<td>2,387</td>
<td>896</td>
<td>201.2</td>
</tr>
<tr>
<td>Veterinary Medical Extension and Continuing Education</td>
<td>6</td>
<td>1,012</td>
<td>58</td>
<td>41.6</td>
</tr>
<tr>
<td><strong>MU Conference Office</strong></td>
<td><strong>1</strong></td>
<td><strong>9</strong></td>
<td>10</td>
<td><strong>0.3</strong></td>
</tr>
<tr>
<td><strong>Arts and Science</strong></td>
<td><strong>15</strong></td>
<td><strong>3,678</strong></td>
<td><strong>298</strong></td>
<td><strong>142.9</strong></td>
</tr>
<tr>
<td><strong>Agriculture, Food and Natural Resources</strong></td>
<td><strong>1</strong></td>
<td><strong>340</strong></td>
<td><strong>16</strong></td>
<td><strong>18.1</strong></td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td><strong>3</strong></td>
<td><strong>263</strong></td>
<td><strong>89</strong></td>
<td><strong>14.9</strong></td>
</tr>
<tr>
<td><strong>Engineering</strong></td>
<td><strong>3</strong></td>
<td><strong>577</strong></td>
<td><strong>81</strong></td>
<td><strong>32.9</strong></td>
</tr>
<tr>
<td><strong>4-H Youth Development</strong></td>
<td><strong>9</strong></td>
<td><strong>2,917</strong></td>
<td><strong>122</strong></td>
<td><strong>201.6</strong></td>
</tr>
<tr>
<td><strong>Journalism</strong></td>
<td><strong>3</strong></td>
<td><strong>1,114</strong></td>
<td><strong>66</strong></td>
<td><strong>72.4</strong></td>
</tr>
<tr>
<td><strong>Medicine</strong></td>
<td><strong>1</strong></td>
<td><strong>32</strong></td>
<td><strong>40</strong></td>
<td><strong>4.3</strong></td>
</tr>
<tr>
<td><strong>MU Administration</strong></td>
<td><strong>3</strong></td>
<td><strong>1,607</strong></td>
<td><strong>28</strong></td>
<td><strong>47.0</strong></td>
</tr>
<tr>
<td><strong>UM System</strong></td>
<td><strong>6</strong></td>
<td><strong>718</strong></td>
<td><strong>87</strong></td>
<td><strong>40.7</strong></td>
</tr>
<tr>
<td><strong>Vice Provost</strong></td>
<td><strong>16</strong></td>
<td><strong>8,430</strong></td>
<td><strong>350</strong></td>
<td><strong>589.6</strong></td>
</tr>
<tr>
<td><strong>Conference Office-hosted</strong></td>
<td><strong>61</strong></td>
<td><strong>19,685</strong></td>
<td><strong>1,187</strong></td>
<td><strong>1,164.7</strong></td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>2,998</strong></td>
<td><strong>80,104</strong></td>
<td><strong>22,921</strong></td>
<td><strong>3,048.2</strong></td>
</tr>
</tbody>
</table>

This table includes noncredit activities reported through MU continuing education units and does not include contacts by cooperative extension specialists.

* Student FTE = Student full-time equivalent

*12 other MU Conference office activities with attendance totaling 3,783 have been distributed among their related academic areas and are represented in the MU Extension unit totals in this table. See page 12 for the summary of all MU Conference Office activities by MU division or program.

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**IPMB Congress is leading biology through plant science**

In early FY 2010, 1,300 scientists and members of the global research community will come together in St. Louis to discuss challenges to improve world agriculture, education and health, which are critical for feeding an estimated world population of 9 billion by 2040. Scientists are working to understand the mechanisms that control plant growth and to teach nations how manipulating these mechanisms for plant improvement possibly could result in increased worldwide food production, thereby improving diet and human health globally. The ninth International Plant Molecular Biology Congress will feature plenary lectures and 54 symposia by scientists worldwide. The MU Conference Office is planning and coordinating this conference.

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**Art Without Borders is an Osher Lifelong Learning Institute course that provides participants an art sampler, allowing them to work with a different teacher and medium each week:** mixed media, photography, drawing, watercolor, oils and acrylics.
## MU Extension statistical data

### Budgeted Expenditures by Program Area — FY 2009

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Expenditures</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuing education programs</td>
<td>$26,800,546</td>
<td>28%</td>
</tr>
<tr>
<td>Human Environmental Sciences</td>
<td>14,905,520</td>
<td>15%</td>
</tr>
<tr>
<td>Agriculture and Natural Resources</td>
<td>14,032,440</td>
<td>15%</td>
</tr>
<tr>
<td>Local program support</td>
<td>13,820,896</td>
<td>14%</td>
</tr>
<tr>
<td>Statewide program support</td>
<td>7,147,738</td>
<td>7%</td>
</tr>
<tr>
<td>4-H Youth Development</td>
<td>6,679,111</td>
<td>7%</td>
</tr>
<tr>
<td>Business Development</td>
<td>5,622,879</td>
<td>6%</td>
</tr>
<tr>
<td>Community Development</td>
<td>4,644,322</td>
<td>5%</td>
</tr>
<tr>
<td>Administration</td>
<td>2,812,236</td>
<td>3%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$96,465,688</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

### Budgeted Sources of Funding — FY 2009

<table>
<thead>
<tr>
<th>Source</th>
<th>Expenditures</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>State appropriation</td>
<td>$28,319,176</td>
<td>29%</td>
</tr>
<tr>
<td>Fees from continuing education programs</td>
<td>19,772,122</td>
<td>20%</td>
</tr>
<tr>
<td>Grants and contracts</td>
<td>17,129,573</td>
<td>18%</td>
</tr>
<tr>
<td>County council funds</td>
<td>10,548,684</td>
<td>11%</td>
</tr>
<tr>
<td>Federal funding</td>
<td>10,005,510</td>
<td>10%</td>
</tr>
<tr>
<td>Sales and services revenues</td>
<td>4,297,886</td>
<td>4%</td>
</tr>
<tr>
<td>MU allocation for continuing education</td>
<td>2,784,975</td>
<td>3%</td>
</tr>
<tr>
<td>Recovery of facilities and admin. costs</td>
<td>1,600,000</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>780,000</td>
<td>1%</td>
</tr>
<tr>
<td>Gift revenues</td>
<td>678,977</td>
<td>1%</td>
</tr>
<tr>
<td>County council grants and contracts</td>
<td>548,785</td>
<td>1%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$96,465,688</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
MU Extension Grants Awarded — FY 2009

**Cooperative Extension**
- Agriculture and Natural Resources $1,287,864
- Business Development 3,929,555
- Community Development 1,675,047
- 4-H Youth Development 1,749,562
- Human Environmental Sciences 9,315,359
- General Extension 39,494

**Continuing Education**
- Fire and Rescue Training Institute $572,035
- Osher Lifelong Learning Institute 50,000
- Missouri Training Institute 152,938
- Nursing Outreach 261,825
- Concert Series 65,999
- KBIA-FM 243,232
- Law Enforcement Training Institute 6,930

**TOTAL** $19,349,840

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**Educational Contacts**

**Cooperative Extension — FY 2009**

<table>
<thead>
<tr>
<th>Program Area</th>
<th>Direct Contact Total</th>
<th>Indirect Contact Total</th>
<th>Total Contacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture and Natural Resources</td>
<td>126,329</td>
<td>101,162</td>
<td>227,491</td>
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<tr>
<td>Human Environmental Sciences</td>
<td>249,418</td>
<td>129,260</td>
<td>378,678</td>
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<td>Business Development</td>
<td>32,372</td>
<td>591</td>
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<td>Community Development</td>
<td>41,602</td>
<td>61,612</td>
<td>103,214</td>
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<tr>
<td>4-H Youth Development</td>
<td>151,186</td>
<td>175,733</td>
<td>326,919</td>
</tr>
</tbody>
</table>

**Totals:** 600,907 468,358 1,069,265

This chart includes both direct and indirect educational contacts. Direct contact occurs when participants are actively engaged in a learning process, whether in a group or individual setting, that promotes awareness and understanding of research-based knowledge and adoption of research-based practices. Indirect contact occurs when the distribution of information and resources does not meet the above definition of direct contact. This can include public events and dissemination of printed materials that deliver educational content.

Participants in Tackling the Tough Skills™ use role playing to practice what they have learned. The program is an innovative and highly interactive life skills curriculum that helps hard-to-reach adults and teens prepare for success in work and life. The curriculum was developed by Rosilee Trotta, an extension urban youth and family specialist in St. Louis, to help individuals transition from welfare to work, but it is easily adaptable to a wide range of audiences and is being used in the workplace to teach “soft skills” to employees. Soft skills are critical life skills that many take for granted.

“It gives me the opportunity to look at myself and understand where I’m at and what are some things I need to do to get to where I’m going... You know, the responsibilities lie with self. And you look at yourself, and you deal with that, which will enable you to deal with what’s going on in your life.”

— Tackling the Tough Skills™ participant, St. Louis
University partners

University of Missouri-St. Louis

UM-St. Louis partners with MU Extension to meet the needs of residents in the St. Louis metropolitan area and statewide. Extension efforts at UMSL are coordinated through the Community Partnership Project, an office charged with developing community initiatives that link University resources with the needs and priorities of residents and communities in the region.

The Community Partnership Project’s lead training program, the Neighborhood Leadership Academy, graduated 18 participants in May 2009. Instruction focused on information and skills necessary to develop and sustain community leadership, to create and implement community improvement initiatives, and to manage community-building organizations.

Neighborhood initiatives linked with University resources to improve access to local and healthy foods in an urban neighborhood, expand housing resources and revitalization strategies for inner-ring suburban communities, and improve academic achievement and community support in an urban school district.

UMKC and MU Extension partner to bring the research of the University to the practice of daily life.

The Institute for Human Development supports University-community partnerships and improved education, health-care and social service programs in the Kansas City urban core. During the past year, activities strengthened urban mission activities and created new research-to-practice partnerships between the University and the community.

The Gateway Program enhances community engagement through white papers on health disparities; a resource guide for Kansas City nonprofits; and the Access to Health Care Project, addressing issues of equitable, appropriate, effective, safe and high-quality health care for all.

The Kansas City Health Equity Collaborative Network collaborated with MU’s Center for Health Policy to present forums on health-equity topics.

Urban Impact Teams: Linking Research and Practice will connect extension activities and professionals statewide to address critical urban issues.

The institute submitted grants valued at more than $720,000 to support urban mission and extension programming. These grants focus on service learning, job readiness for urban youth, leadership programming, healthy lifestyles for Latino families and capacity building for small nonprofit organizations.

The Center on Aging Studies is a resource for older Missourians and those who assist them. Current programming and resource development is centered around caregiver issues; successful aging; and mental health issues and supports.

The MU Extension Business Development Program serves entrepreneurs and business owners in the Kansas City area. Program specialists reported economic impact of: 2,145 new or retained jobs; sales of $26.3 million; $94.5 million in government contracts; and $2 million in investments in new or existing businesses. New technology ventures reported $187,527 for Small Business Innovation Research and Small Business Technology Transfer proposals, and $285,519 in research grant awards.
Lincoln University Cooperative Extension continues to reach underserved individuals across the state with educational resources and programs in St. Louis, Kansas City, Southeast Missouri and through the main office in Jefferson City.

Limited-resource individuals and families are the priority audience for these efforts. From field staff to state specialists to the administration, programs improve clients’ standard of living by disseminating research-based education and offering hands-on training to thousands of people living in the state.

Programs include expanded food and nutrition education, after-school tutoring, citizenship, public speaking and communication, college preparation, summer enrichment camps, leadership development academies, and community and intergenerational gardening.

LU Cooperative Extension provides state specialist leadership for the vegetable and small-ruminant (sheep and goats) programs delivered by regional specialists, regional and area educators, and program assistants at the local level.

Highlights of FY 2009 outreach efforts include the Institute on Minority Aging, workshops focused on waste reduction, home composting and energy conservation; field days that incorporated a variety of topics, including native plants, gardening and small-ruminant health; and the Innovative Small Farmers Outreach Program. The latter was created to help the state’s small farmers and ranchers, especially those who are socially disadvantaged and underserved, to raise the levels of efficiency on their farms while taking good care of the soil, water and environment.

Missouri University of Science and Technology


Mike Koenigstein of St. Louis-based Pro Perma Engineered Coatings has partnered with Mo-Sci Corp. of Rolla’s Ted Day as well as Genda Chen, PhD, professor of civil, architectural and environmental engineering, and Richard Brow, PhD, professor and chair of ceramic engineering. The team developed a novel process for chemically treating rebar to prevent it from corroding while also strengthening it. As the business develops, Pro Perma plans to move into production, bringing high-paying technology jobs to the area as well as employing student interns.

Dissatisfied with existing job opportunities for students, Michael Orlando launched a student business called Interdisciplinary Design Collaborative. He and his team of fellow students form the firm’s core. To take advantage of the unusually high technical expertise and problem-solving skills of Missouri S&T students, IDC developed a corporate structure for simultaneous, multidisciplinary projects. Since the company was founded in late 2008, IDC has received four small grants and is pursuing large Small Business Innovation Research and Small Business Technology Transfer grants. IDC also has won two 18-month service contracts.

Also during the year, the SBTDC hosted 15 training conferences and helped to present the first Rolla Regional Business Conference, which reached more than 150 attendees. The office counseled 56 clients, including assisting in 32 research proposals totaling $7,980,891, of which $2,456,837 was funded. The Technology Transfer office received a record 40 invention disclosures, filed 21 patent applications and had four new patents issued. Twenty-seven licenses and options generated more than $190,000 for the inventors and Missouri S&T.
How to cope in the face of tough economic times has been the overarching concern of Americans throughout much of the past year. In response to these challenges, MU Extension redoubled its efforts to reach those hardest hit in Missouri, including consumers, business owners, families and individuals, with resources to help them thrive despite threats to their employment, financial and household security.

Home sweet home...savings

Record numbers of foreclosures, bankruptcies and job losses are affecting Missourians at nearly every income level, as lending agencies and banks scrutinize their credit worthiness like never before.

To overcome the effects of lenders' tightened purse strings, MU Extension human environmental sciences specialists work to promote successful home-buying experiences and long-term ownership by educating those who face challenges in securing loans. Of the 240 Missourians educated through the MU Extension Homebuyer Education Program in FY 2009, more than half were low-income wage earners, and many were first-time home buyers.

On average each year, program participants seek loans of $92,000, and about 20 percent of them successfully close their housing purchases within a year of completing the workshop. Attendees purchase approximately $4.4 million in total real estate value, with the average consumer saving $15,000 in closing costs, interest and other fees throughout the life of the loan. This represents a total of $720,000 that remains in the pockets of those MU Extension-educated purchasers.

In addition to helping new buyers reach their goals, MU Extension every year provides 1,000-plus existing households with information and resources to promote successful long-term homeownership.

Savings on utility bills can equate to an increase in monthly spendable income. Missouri homeowners who attend MU Extension-sponsored energy management and savings workshops learn ways to weatherize their houses, saving an average of 5 percent to 15 percent per residence, or $1,500 annually, on utilities. Last year, that amounted to a collective savings of approximately $170,000.

MU Extension also provided four-hour workshops on basic home-repair techniques to 120 owners of houses that were at least 30 years old. Specialists helped participants apply for secured grants and low-interest loans, from which they received an average of $3,500 per applicant for a total of $420,000 in home repairs.

Healthy Homes is another MU Extension program helping Missourians to save money, improve homes and create safer living environments. Attendees learn safe ways to remove and mitigate radon, mold, lead, carbon monoxide and other health hazards from residences. Based on national research data, if Missouri’s Healthy Homes participants in FY 2009 took at least one step in fighting a residential toxin,
the program may have saved them up to $42,000 in total medical expenses.

The Solutions for Better Living section of the Missouri Families Web site, missourifamilies.org/toughtimes, gives Missourians unbiased, research-based information for solving economic dilemmas affecting their families.

**Getting down to business**

Annie's Project is a nationwide effort that targets farm women and landowners, providing information on risk-management topics to improve decision making in an environment that fosters learning and encourages understanding of business concepts. In addition to being actively involved in farming operations, participants often are the household executives and primary caregivers for their families. Annie's Project empowers farm women to become better business partners. In FY 2009, 170 Missouri women participated in Annie’s Project workshops.

**Learning and successfully applying proper business skills are integral to success in any industry. MU Extension specialists work with business owners throughout the state, tapping into myriad resources to provide those skills — and information resources — to bolster the firms and their local economies.**

In the heart of the state, PureFlow Technologies Inc. produces and markets a device that improves the efficiency of diesel engines up to 12 percent, thereby greatly reducing pollutants and increasing power. Owners Charles Ekstam and Dora Serrano, a Jefferson City husband-and-wife team, have worked for several years with the local MU Small Business and Technology Development Center to devise a marketing strategy, develop financial modeling and pinpoint potential funding sources for the product, called the Fuel Preporator®.

PureFlow has hired 17 employees and has contributed to Missouri’s recognition as a technology leader. In FY 2009, the company received legislative resolutions from state Rep. Mark Bruns and Sen. Carl Vogel honoring its enterprising contributions to the state’s economic development efforts.

**East Central Region — Past meets future**

From rich farmland to historical cityscape, MU Extension’s East Central Region represents some of the state’s greatest geographic and cultural diversity and wide-ranging economic activities.

In fact, four of the region’s 10 counties and the City of St. Louis contribute 35.3 percent of Missouri’s entire “economic share” — the percentage of the state’s economy that is accounted for by an individual county. Health care and social assistance, retail trade, manufacturing industries and other commercial businesses, such as accommodation and food services, are the majority of the region’s employers.

Situated at the confluence of the Missouri and Mississippi rivers, the region boasts some of the most fertile land found anywhere in the state. Yet competition for that land, in this highly populated region, is keen for use far beyond agriculture. For the past 50 years, bedroom communities have popped up alongside the region’s original towns and neighborhoods, often in stark contrast to the old cities of Ste. Genevieve, St. Louis and St. Charles.

According to MU Extension’s Office of Social and Economic Data Analysis, more than 63 percent of the region’s population lived in incorporated areas of 2,500 or more residents during 2008. Median household income was recorded to be about $7,500 higher per family than in the rest of the state, and houses in the region sell for about $10,000 more than the Missouri average. With higher homeownership, the region also boasts a lower overall poverty rate — 10.8 percent in 2008, compared to 13.3 percent statewide.

While demographic and economic data are invaluable to understanding the region, local MU Extension councils, faculty and staff are the people behind the numbers who daily make an impact in the lives of East Central Missourians. MU Extension works to help residents start new businesses and grow existing ones, to provide young people with character and leadership skills, and to develop local leaders, giving their communities a whole new outlook on their future.

The counties of Franklin, Jefferson, Lincoln, Montgomery, St. Charles, St. Francois, St. Louis, Ste. Genevieve, Warren and Washington, as well as the City of St. Louis comprise MU Extension’s East Central Region. They also include some of the oldest European settlements west of the Mississippi River.
MU Extension is combining revitalization and sustainability efforts to help bring back one of the oldest neighborhoods in St. Louis, called “Old North St. Louis.”

Originally named the Village of North St. Louis in 1816, the 90 blocks that encompass the Old North St. Louis neighborhood now sit in a section of the city just north of downtown and bordered to the east by Interstate 70. Once a densely populated and vibrant neighborhood, the Old North St. Louis community has experienced tremendous decline and depopulation for nearly 50 years.

But MU Extension is working to change the neighborhood’s plight. In partnership with the not-for-profit Old North St. Louis Restoration Group and the Community Partnership Project at the University of Missouri-St. Louis, MU Extension has taken huge strides to bring back the neighborhood’s community appeal, starting with its ability to sustain the individuals and families who live there.

Two of the biggest problems facing the neighborhood are the shortage of fresh foods and the inaccessibility of healthy eating options. Residents are limited mostly to fast-food restaurants and convenience shops. Based on MU Extension surveys, residents who have access to a car drive up to 10 miles just to purchase groceries, and many shoppers are forced into 20-minute or longer bus commutes.

Currently, MU Extension is helping the neighborhood develop a comprehensive strategy to increase access to healthy foods in Old North St. Louis, including a weekend farmers’ market, a community garden, a community-supported agriculture program that delivers fresh fruits and vegetables to local families every week, and the longer-term development of a grocery co-op in a renovated warehouse central to the neighborhood.
Guests enjoy a meal at Chaumette Vineyards and Winery near Ste. Genevieve. The region is part of the Mississippi River Hills, an ecologically distinct region that runs along the Mississippi River south of St. Louis, encompassing portions of six Missouri counties: Jefferson, Ste. Genevieve, St. Francois, Perry, Cape Girardeau and Scott. Mississippi River Hills is the first eco-region developed by local stakeholders with the help of MU Extension’s Missouri Regional Cuisines Project — an effort to establish a label of origin for locally produced wines and foods, as well as tourism. Identifying labels of origin will mean greater recognition and economic opportunities for Missouri’s food producers, the tourism industry and rural communities.