



University of Missouri Extension

# Growing Missouri's Future



## 2010 Annual Report



**RELEVANT**

**RELIABLE**

**RESPONSIVE**

UNIVERSITY OF MISSOURI  
**U** Extension

# MU Extension in the South Central Region

**The South Central Region encompasses 16 Missouri counties — Camden, Crawford, Dent, Douglas, Gasconade, Howell, Laclede, Maries, Miller, Oregon, Ozark, Phelps, Pulaski, Shannon, Texas and Wright — three of which border Arkansas.**



**Greer Spring in Oregon County is Missouri's second largest spring. The powerful spring flows through a beautiful wilderness into the Eleven Point River. (Jim Curley photo)**

**F**rom its steep, near-mountainous Ozarks hillsides to rolling pastures and valleys, all variegated by many of the state's most popular waterways, MU Extension's South Central Region is a gentle giant of Missouri's landscape.

MU Extension's Office of Social and Economic Data Analysis reports only a quarter of the region's population of more than 375,000 lives within incorporated towns or cities having 2,500 or more residents. The vast majority live in unincorporated rural areas, where nearly 74 percent of residents own their homes, slightly higher than the average homeownership rate statewide.

Though the median household income is markedly lower in the South Central Region (at about \$8,000 per year less than Missouri's average income) single-parent families are fewer. Overall, two-parent and

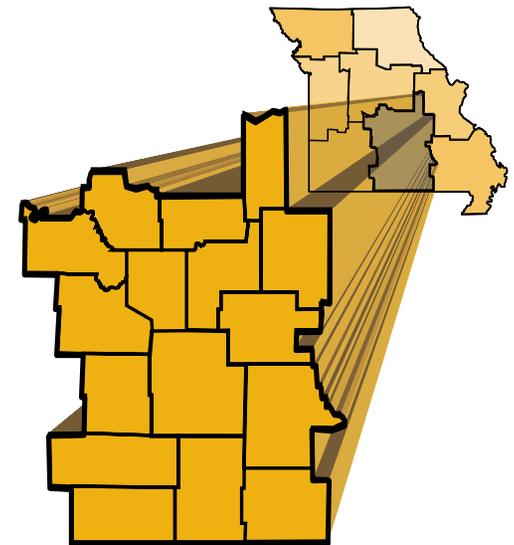
single-parent families comprise more than 71 percent of the area's households. Unfortunately, poverty is 4.5 percent higher among those families than in other regions of the state, with children being especially at risk. In 2008, the poverty rate among children was 26.6 percent, compared to a statewide percentage of less than 19 percent. To combat the problem of hunger, more than 50 percent of school-aged children receive free or reduced-price lunches. MU Extension programming continues to find ways to provide healthy food options for those residents in need. (See "MU Extension in South Central Missouri: Healthy Lifestyles," Page 31.)

Despite the area's economic hardships, education is important to the region's residents, evidenced by an

89 percent high school graduation rate that trumps the state average by nearly 5 percent, as reported by the Missouri Department of Elementary and Secondary Education.

In appreciation of its quiet nature and vast landscapes, people continue to settle from other places into the South Central Region, which data show had an overall net migration of more than 12,500 residents over the past decade.

MU Extension continues to look for ways to provide the people of the South Central Region with access to the resources they need most to grow their futures, from community and youth development projects to agricultural research and business and technical support.



# Contents

## On the cover

- (Top) The University of Missouri System named Missouri S&T students (from left) Colby Hall, Michael Orlando and R.J. Miller as its Student Entrepreneurs of the Year for 2010 (see Page 8).
- (Center) The Townley House Museum in Chamois was featured on MU Extension’s “Capitalizing on Your Community’s Heritage: Tourism for Local Economic Development” pre-conference tour in April 2010. In 2002, the Townley family was recognized with the Missouri 4-H Century

Family Award for its 159 years of sustained involvement in the 4-H program.

- (Below left) With help from area partners and volunteers, MU Extension’s Eating From the Garden program (see Page 23) continued to provide free research-based nutrition information and gardening activities to schools and communities with at-risk youth to increase consumption of fruits and vegetables, healthier food choices, gardening knowledge and physical activity among the 1,400 fourth-

and fifth-grade students who participated during the past two years.

- (Below right) Continuing education programs are reaching thousands of students each year with online degree and certificate offerings and courses from the University of Missouri to help nontraditional students like Kristi Fletcher achieve their educational dreams (see Center for Distance and Independent Study, Page 22, and Growing distance education, Page 28).

## MU Extension Programs

Message From the Vice Provost.....	4
4-H Center for Youth Development .....	5
Agriculture and Natural Resources.....	6
Engineering Continuing Education .....	7
Business Development .....	8
Community Development .....	9
Continuing Medical Education and Cooperative Extension Health Education ..	10
Fire and Rescue Training Institute .....	11
Human Environmental Sciences.....	12
KBIA-FM and University Concert Series .....	13
Labor Education.....	14
Law Enforcement Training Institute .....	15
Missouri Training Institute .....	16
MU Conference Office.....	17
Nursing Outreach.....	18
Osher Lifelong Learning Institute.....	19
Veterinary Medical Extension and Continuing Education .....	20
MU Direct: Continuing and Distance Education.....	21
Center for Distance and Independent Study .....	22

## MU Extension Statistical Data

Noncredit Activities.....	24
Educational Contacts — Cooperative Extension .....	24
Credit Course Offerings .....	25

## MU Extension Partners and Regional Focus

MU Extension in Urban Missouri.....	23
University Partners .....	26
Growing Distance Education .....	28
Growing Missouri’s Economy .....	30
MU Extension in South Central Missouri: Healthy Lifestyles .....	31

The FY 2010 annual report features MU Extension’s South Central Region. Offering some of Missouri’s most scenic countryside, the rolling landscape of the Ozark Mountains and major recreational lakes and waterways attract tourists from throughout the Midwest. Extension programs play a vital role in building a thriving regional economic infrastructure while providing a foundation for an educated, healthy population. Read more about this region on Page 2.

Gold text boxes throughout this report show how MU Extension makes a positive difference in South Central Region communities.

# Message From the Vice Provost

**W**ithout question, jobs are a major driver of economic recovery. More than any other statistic affecting Missouri's communities and families, changes in employment rates hit closest to home. While other indicators, such as consumer confidence, access to credit and low inflation seem beyond the average voter's control, Missourians have shown we can take charge of our economic destiny by creating jobs and building a workforce that is well-prepared for productivity and success.

Our state has a valuable resource available that helps spur such growth — University of Missouri Extension. With a strategically positioned network of specialists, MU Extension provides expertise and engagement that serve as catalysts for businesses, government and nonprofits to come together and create positive futures for communities, including stable employment opportunities for local residents.

A land-grant university has the unique capacity both to discover new knowledge and translate



**Michael D. Quart, vice provost and director**

it in meaningful, practical ways to citizens. MU Extension is charged with bringing that relevant, vital education to every part of Missouri through programs in business development, agriculture, community development, 4-H, nutrition and health, and continuing education. It's a responsibility we take seriously every day.

In this annual report, you will see examples of how our programs

- redirect those who have been laid off from work

- into new ventures as entrepreneurs;
- revitalize some of the state's struggling urban neighborhoods;
- keep physicians, teachers, firefighters and union workers at the top of their professions; and
- prepare Missouri's youth to become the next generation of scientists and business innovators.

With 1,082,670 educational contacts recorded in FY 2010 — in addition to 99,340 continuing education enrollments — we undoubtedly touched lives throughout the state. Odds are that you know someone whose life or employment picture is better, thanks to the people and programs of MU Extension. Thank you for being part of that continued success in growing Missouri's future.

# 4-H Center for Youth Development

Ina Metzger Linville, PhD, director

4h.missouri.edu

**In its most recent fiscal year, the 4-H Center for Youth Development enlisted 10,674 volunteers, who provided the equivalent of \$14 million-plus in services for 95,813 Missouri youths, ages 5 to 18.**

**A**nticipating what it takes for Missouri's adolescents to be healthy and thrive is one goal of MU Extension's 4-H Center for Youth Development.

The ongoing national 4-H Study of Positive Youth Development gathers important information from thousands of children and teens, not just 4-H members, to provide better understanding of the levels of life experience and support needed for success. More than 6,000 students and 3,000 parents from 41 states were surveyed in the first six years. Since 2007, when Missouri joined the national study, 615 youths in grades six through 12 at 26 sites also have participated.

Analysis of the recent Missouri data continues to show significant differences exist between Missouri kids who are active 4-H participants and those who are non-participants, particularly among older teens.

High-schoolers taking part in 4-H at least twice



**Aerospace Camp helps 4-H to grow future scientists. Each summer, 4-H'ers benefit from three days of hands-on aeronautical education at the Missouri University of Science and Technology in Rolla. The camp provides simulated space exploration experiences that include interactive missions with the Challenger Learning Center, flight simulations, rocket building and launching, adventure-based team-building activities and robotics.**

a month gain more firsthand leadership experience while in school and have higher expectations for attending and completing college. Also, 4-H members report fewer unhealthy behaviors, such as drinking, smoking and other drug use, than their peers.

As technology changes almost exponentially, so does the demand for trained scientists and engineers — and the need for broader understanding of technology and science by all citizens. Future scientists are critical to the state economy; 75 percent of Missouri's \$9.5 billion in products and services exported in 2009

were from science, engineering or other technology-based industries.

4-H recognizes this demand and in the last fiscal year recorded 332,090 youth contacts and 19,018 adult contacts in projects related to science, engineering and technology.

Interest in science is a predictor for students to choose science-related careers. 4-H members typically report an increased interest in science at a rate three times that of non-4-H students. But female 4-H'ers in particular now show an interest in science tenfold beyond their peers.

Last year, Missouri 4-H enrolled 10,674 volunteers. Volunteers donate an average of six to 10 hours per week, or 72 to 120 hours annually. The Independent Sector, a nonpartisan leadership forum, values a Missouri volunteer's time at \$18.70 per hour. Accordingly, the state's 4-H volunteers provide \$14 million to \$24 million in services annually.

Educational events and camps give 4-H'ers opportunities to demonstrate knowledge and skills each year, and members report having a strong connection to Mizzou. Through events including State 4-H Congress, State 4-H Teen Conference, Fashion Revue, Camp Food and Fitness, Architecture and Interior Design Workshop, and 4-H contests, 3,659 4-H family members visited the MU campus in FY 2010.

# Agriculture and Natural Resources

Marc Linit, PhD, associate dean, and David Baker, program director and assistant dean, College of Agriculture, Food and Natural Resources

[cafnr.missouri.edu/extension](http://cafnr.missouri.edu/extension)

**With help from MU Extension, community-supported agriculture efforts are helping urban residents gain access to locally grown fruits and vegetables. The St. Louis-based Old North community garden last year alone grew more than 1,300 pounds of healthy produce, which it sold at below-market prices to local urban residents.**



**Letting dairy cows graze in fields rather than feeding them in centralized facilities might seem old-fashioned, yet for a growing number of Missouri farmers it makes good economic sense. Pasture-based dairying has gone mainstream. More and more dairy farmers, including Eric Hoffman of Trenton, are using the advanced grazing practices developed by the University of Missouri.**

otherwise resulting from corn and milo nitrogen loss. In addition, scouting cotton for pests and then using the survey reports to make pest management decisions resulted in a savings of \$9 million during FY 2010. The savings to Missouri farmers from MU Extension's soybean rust monitoring program was \$5 million. And crop advisers who attended a three-day crop management conference influence production decisions on more than 9.5 million acres.

Improved ration formulation decisions have reduced feed costs and improved feed efficiency by 30 percent to 40 percent, resulting in a statewide

economic benefit of almost \$15 million. Researchers are finding that the added value of Tier II Show-Me-Select Heifers is more than \$184 per head over Tier I heifers and \$370 per head over commercial-bred heifers. Investments in pasture improvements by participants in regional grazing schools exceeded \$5 million in FY 2010.

The Missouri Value Added Center staff helped clientele apply for competitive grants valued at \$50 million. Participants in a workshop on record-keeping learned how to use Quicken software in their businesses, and 67 percent indicated that their record-keeping improved as a direct result of the training.

Missourians understand the need to protect and improve their water resources. Ninety percent of participants who attended on-site sewage system workshops indicated they would implement maintenance and repair practices that will reduce pollution and improve overall water quality. More than 90 percent of participants in the Healthy Yards for Clear Streams program indicated they would change one or more landscape practices and have a soil test conducted on a regular basis. Nearly nine in 10 said they would install a rain barrel or rain garden to reduce and control storm water runoff, and 78

Mary A. Myers, PhD, director

Engineering Continuing Education provides cutting-edge educational programs that unite College of Engineering and MU Extension resources to serve Missouri's professional engineering community.

In FY 2010, the program offered its first large-scale online engineering course, and more than 200 students enrolled. Post-course assessments and evaluations showed enhanced student interest and learning in the online offering, compared to the traditional face-to-face class.

The program received a grant to fund a full-time instructional designer, whose work will enable the college to expand its distance education outreach. Three UM System e-learning grants were awarded to create online versions of the college's thermodynamics, statics and mechanical engineering design courses.

Engineering's Pollution Prevention, or P2, Boot Camp, currently in development and under peer review, will join the expansion. In today's economy, P2 strengthens Missouri's competitiveness by fostering engineering efficiency improvements related to the use of the state's raw materials, energy, water and natural resources. The one-week course focuses on applied engineering methods and tools to reduce or eliminate waste at its localized sources.

For the third year, the P2 Boot Camp was offered through MU Direct to engineering students during both spring break and the summer intersession, and again was filled to capacity. Students admitted to the class also are eligible for selection as MU P2 interns. Interns receive a 10-week paid industrial position to apply their training. During summer 2009, six P2 interns, placed in two Missouri companies, engineered annual savings of \$223,000 for their host firms. In the past three years, P2 interns have saved businesses in the state \$746,300.

During summer 2010, nine interns worked at 10 different Missouri companies that also anticipated substantial savings for their participation in the program.

percent said they would reduce the use of chemicals and apply the correct amount of fertilizer on their lawns and gardens.

In FY 2010, MU Extension initiatives continued to address urban "food deserts" by developing community gardens, farmers' markets, grocery cooperatives and community-supported agriculture efforts that connect consumers to local food sources and promote good nutrition and healthy lifestyles. In St. Louis, local cooking demonstrations further strengthen the connection between the new Old North Grocery Co-op, its farmers' market and the community garden. The garden grew more than 1,300 pounds of healthy produce in 2009 that it sold at below-market prices to neighborhood residents.

Also last year, the new Pets Helping Agriculture in Rural Missouri project connected working and service dogs with farmers who have disabilities and other medical conditions.

The Missouri Woodland Steward Program has led to management plans being developed for 87,130 acres, resulting in \$48.8 million in economic benefit.



Vietnam vet Mark Hess rides in a specially designed golf cart for people with disabilities. Thanks to a partnership between University of Missouri Extension and the St. Louis Veterans Affairs Medical Center, veterans of all ages and skill levels benefit from the exercise and enjoyment golf can provide.

### Missourians helping Missourians — healthy eating choices for those in need

The newly reorganized Texas County Master Gardeners provided more than 1,300 pounds of fresh produce to the Texas County Food Pantry in Houston and developed more than 100 vegetable beds in community gardens.

For the year, Master Gardeners contributed 140,191 volunteer hours to projects focused on improving the quality of life and the environment in their communities. They contributed 37 percent of their volunteer time to horticulture education and 14 percent to community improvement projects.

# Business Development

Max E. Summers, interim program director and associate dean, entrepreneurship and economic development, College of Engineering

missouribusiness.net

**More than 17,500 small-business owners and entrepreneurs across Missouri sought information and resources from the Business Development Program — up 2,000 from the previous year.**



**Liz Forkin-Bohannon receives business counseling from Susan Henson, an MU Extension business development specialist in Kansas City. The FastTrac NewVenture program helped Forkin-Bohannon start a business that partners with Ugandan women to achieve their college education while making sandals for the business.**

**I**mproving the competitiveness and success of Missouri's small businesses through research-based education and technical assistance is how MU Extension's Business Development Program enhances the state's economy year after year.

Along with increased client sales statewide at \$135.9 million, 2,073 new jobs, \$138 million in new financing for these businesses and \$287.6 million in government contracts, the faculty counselors create a definitive economic impact both for the state, and for the individual small-business owners it serves.

The Kauffman Index of Entrepreneurial Activity reported that entrepreneurial business start-ups reached their highest level in 14 years during 2009 — exceeding the levels of the peak 1999-2000 technology boom. One such start-up is Cornerstone

Energy Solutions in Rolla.

After interviewing for several jobs following his spring 2008 graduation from the Missouri Univer-

sity of Science and Technology, mechanical engineer David Pollack experienced an entrepreneurial revelation. His vision involved starting an energy-related business in Rolla with a focus on energy efficiency in residential, commercial and industrial settings. But before he could launch his venture, Pollack needed a business plan to identify financial resources. He turned to Mick Gilliam, MU Extension business development specialist in Phelps County.

"Mick gave me the steady, experienced hand I needed to take the steps to establish my business," Pollack said. "I had the technical expertise to design and conduct the work of my business. I just didn't

have the business knowledge I needed to get it off the ground and keep it running. Mick guided me expertly."

## Making it to the big time

**It was no surprise to Missouri S&T faculty and students to hear alumnus Michael Orlando had started his own company after graduating. Orlando, who currently is pursuing his master's in engineering management, founded the Rolla-based Interdisciplinary Design Collaborative in 2008. The company's business model relies on the technological talents of students looking for real-world business experience, Orlando says. About 40 S&T students work with his company at some level, as software developers or in performing design, research or development.**

**Projects include iPhone applications like Made in America, which helps consumers find U.S.-made products, and an adaptive system that would analyze energy use and provide homeowners with ways to save on costs.**

# 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](http://extension.missouri.edu/cd)

**Last year, MU Extension's community development programs leveraged nearly \$36 million in resources at the local level, including more than 47,000 volunteer hours valued at \$834,844.**

MU Extension's Community Development Program provides Missourians with organizational and leadership skills, and encourages increased civic engagement to strengthen their communities. The program collaborates with citizen action groups, organizations and individuals to develop more viable area-wide economies through local food systems, increased cultural and heritage tourism dollars, and improved community health.

Faculty and staff work with local, regional and state decision-makers and use customized approaches to promote community development statewide.

The Community Development Academy teaches Missourians to explore ideas and develops practical skills for effectively involving and empowering local citizens and leaders in community-based efforts. During FY 2010, academy participants alone



**The Grow Your Farm program helps families like the Knolls to look at farms differently. Through refining a business plan, looking at financial opportunities and evaluating each farm's resources, Justin Knoll, his mother, Melissa, and father, John (not pictured), developed a plan to enhance their nursery business, integrate a photography business and refine their hay and cattle operation.**

leveraged \$3.89 million and \$487,000 worth of volunteer hours for community programs.

Throughout the year, the Office of Social and Economic Data Analysis made state wage and labor information more accessible and helped transportation planners better determine demographic impacts of proposed community improvement projects.

Because the nonprofit sector plays a significant role in the economic vitality of Missouri communities, the program helped establish 59 new tax-exempt non-

profits and empowered existing groups to strengthen boards and financial operations, develop action plans and new collaborations, and to contribute to the health of their local populations. Residents living in the urban "food desert" of Old North St. Louis have access to locally grown fruits and vegetables through a new community-owned grocery co-op, founded in part through MU Extension efforts.

Community leadership development programs yield engaged and diverse rural and urban leaders. Across Missouri, each local program results in an average of 10 new community projects, including the recent financing and building of a new Camdenton high school and aquatic center in Moberly. In FY 2010, fifty-one leadership development programs added to the capacity for Missouri's future.

An in-depth study of the MU Extension Community Economic and Entrepreneurial Development program, or ExCEED, shows that Missouri adults and youths increasingly believe in a positive future for their regions and that they value the University and MU Extension more in helping them to "think outside the box," and for bringing new ideas and engagement to their communities.

**MU's continuing medical education program provides learning opportunities for health-care practitioners that incorporate the most up-to-date research and clinical guidelines available. In FY 2010, more than 1,100 programs reached 15,000 professionals across the state and around the world.**

**M**U Extension's Office of Continuing Medical Education ultimately helps to improve the health of Missourians by providing education and programs to increase physicians' scope of diagnosis and treatment options.

The office brings together various health-provider segments, networking professionals to support an international base of health-care education. As liaisons between generalists and specialists in various fields of medicine and research, faculty and staff promote awareness and understanding of the latest medical procedures and techniques, including ever-

## Midwest Women's Health Practitioners Network in the South Central Region

Representing nine states and 26 Missouri counties, more than 130 obstetricians, internists and family practice physicians, as well as nurses and midwives, participated in the third annual Women's Health Symposium in Lake Ozark. In addition to the Office of Continuing Medical Education, the event was co-sponsored by the MU department of obstetrics, gynecology and women's health, School of Medicine and Sinclair School of Nursing.

Events like the symposium help generate tourism dollars throughout the region year-round. In the Lake of the Ozarks area of Camden and Miller counties, tourism-related activity alone accounted for more than \$178 million in state revenue and 4,600-plus jobs in 2009.

increasing standards of patient care implemented at the MU School of Medicine and University Hospital and Clinics.

Working cooperatively with the Missouri Telehealth Network has allowed the office to extend its support into rural communities around the state. With MU Extension bringing educational opportunities to physicians, they can focus on patients' needs and take less time away from their practices to learn first-hand about research findings, as well as innovations by other providers nationwide and internationally. Events broadcast through the network in FY 2010 gave rural providers access to ongoing education that otherwise might be inaccessible without taking

considerable time, travel and expense. In addition, providers and staff within the university system can access the programs from their clinical locations. The office broadcast 300 hours and awarded 850 continuing education credits in FY 2010.

The office's cooperative extension health education program, using both the School of Medicine and the MU Extension network as a base, also works to improve the health and health literacy of Missourians. Faculty members accomplish this mission by developing, implementing and evaluating clinic- and community-based chronic disease prevention, self-management and overall health improvement interventions.

In FY 2010, more than 600 Missourians participated in 68 Eat Well Be Well With Diabetes workshops throughout the state. Evaluations showed many participants making significant lifestyle improvements as a result, such as eating the right amount of food to keep blood sugars in a normal range, checking glucose levels as recommended by providers, and choosing and preparing healthier foods.

# Fire and Rescue Training Institute

David E. Hedrick, director

mufrti.org

**On average, the institute begins 14 courses each week at locations across the state. Last year, courses held in 85 Missouri counties drew participants from every county, 42 other states and two foreign countries.**



**Personnel exit a training facility in Jefferson City where professional and volunteer firefighters ran live fire drills and honed other skills June 8-13 at the MU Fire and Rescue Training Institute's 78th annual Summer Fire School and Midwest Wildfire Training Academy. More than 700 emergency responders from 16 states used the event to sharpen and refresh their skills.**

Every day, Missouri firefighters and emergency personnel respond to fires, medical emergencies and disasters to protect people and property. Most of those responders are trained each year through MU Extension's Fire and Rescue Training Institute.

As residential areas and new communities continue to expand across the state, the need for fire protection and emergency response also increases. In FY 2010, Missouri gained seven new fire departments. However, most of the state's 896 fire departments are staffed by volunteers, who make up about 70 percent of fire service personnel.

To adequately protect Missourians from fires, natural disasters and other life-threatening emergencies, professional and volunteer firefighters, as well as other emergency first-responders, must receive

realistic, effective and standards-based training.

The institute continues to serve as the state's classroom for teaching fire and emergency technical skills and knowledge by delivering programming locally to communities statewide, as well as through annual and regional fire schools. In FY 2010, its courses reached 20,391 emergency service personnel.

Courses delivered through a variety of methods, including face-to-face classes in 85 Missouri counties and online webcasts, make the institute accessible to

participants from all 114 Missouri counties. In addition, FY 2010 registrants included students from 42 other states and two foreign countries.

Comprehensive training topics include structural, wildland and aircraft firefighting; emergency medical care; technical rescue; environmental emergency mitigation; fire service instructor and company officer development; counterterrorism; emergency management; and emergency planning and exercise evaluation.

In all, the institute provided 273,498 instructional hours of training through 755 continuing professional education courses for fire and emergency service response students during FY 2010.

## **Show-Me Fire Training**

**The Fire and Rescue Training Institute is known for bringing its training to the student. Staff and instructors regularly transport specialized fire training props and equipment throughout Missouri, as well as other states, traveling 163,386 miles to deliver training at the local level in FY 2010. The institute's fleet of 20 trailers logged another 71,085 miles — for a total of 234,471 miles — to support program delivery and to supply necessary equipment, fire training props and materials to rescuers-in-training.**

**Human Environmental Sciences Extension provides Missourians with tools to build stronger futures and live healthier lives, including programs that develop financial education and family resources, promote healthy homes and workplaces, build individual nutrition and health, and increase physical activity.**



**You are never too old to pump iron. The Advanced Stay Strong, Stay Healthy program uses weight training to challenge older adults. The 10-week MU Extension program, offered in urban and rural communities, allows seniors to get into a workout routine.**

**A**wareness activities in FY 2010 reached nearly 450,000 people, and the faculty directly educated more than 288,000 Missourians through classes and workshops, online resources and interactive television.

Even as the economy and job market slowly began recovering, many Missouri families continued to stress about their finances and futures — and with good reason. Compared to a moderate-income, two-parent family in 1960, which spent the equivalent of \$182,857 in 2009 dollars to raise a child to age 17, research shows that today's family must spend about

\$222,360 — a 22 percent increase in real dollars.

Throughout the year, family financial educational programming helped 11,250 Missourians focus on money management, insurance, credit, saving and investing, and taxpayer education. Program development continues for low-income families, with research under way to target projects for young adults. Other audiences include students and teachers, young families, women, inmates and those on probation or parole, parents and professionals who work with low-income families. Another 8,809

people were reached indirectly through newsletters, mailings and media information, at fairs and with additional promotions.

Building Strong Families: Challenges and Choices helps participants learn their strengths, build on them and gain life skills to create stronger families, improve relationships and increase interpersonal communication. The program targets working families with children and also reaches teens, single parents, grandparents, child care providers and inmates.

As part of a national effort to raise awareness about indoor air pollutants and improve in-home air quality, MU Extension's Healthy Homes program educates consumers about a multitude of household hazards. The program teaches homeowners

and renters about sources of pollution, health risks and control measures. Last year, it was expanded to train commercial building owners.

The Healthy Lifestyle Initiative works to create communities that support the availability of healthy, affordable and locally produced food and safe, accessible physical activity. The program partners with a wide range of agencies and other groups to ensure that each community's resources, needs and desires are fully identified and incorporated.

# KBIA-FM and University Concert Series

Michael W. Dunn, director

[kbia.org](http://kbia.org) and [concertseries.org](http://concertseries.org)

**More than 12,000 people attended on-campus Holiday Festival performances during six University Concert Series events in FY 2010.**



**African a cappella group Ladysmith Black Mambazo performed in February to a nearly sold-out audience. The following morning the auditorium was once again filled, this time with more than 1,500 area youths, seniors and other groups. This was the first time many youths had seen a live professional performance. Thirty young people were randomly selected from the audience to perform with the group onstage.**

**I**nforming and engaging communities by providing news and entertainment broadcasts, KBIA-FM, MU's National Public Radio affiliate, serves more than 30,000 listeners in and around the campus community and across 19 rural counties in Central and Northeast Missouri. Most of these listeners have no other reliable access to in-depth news and arts programming via radio.

KBIA expanded its reach during FY 2010, launching KAUD-FM, a repeater station that offers the city of Mexico and Audrain County three digital program options, including new live reports on agribusiness issues, supplemental podcasts of all local non-music content and on-demand video. KBIA's efforts were rewarded with its most successful fund-raising campaigns to date.

In its 102nd season, the University Concert Series not only brought world-class arts and entertainment to mid-Missouri, but also reached out to nontraditional audiences. The series included an array of international performers in its event lineup; incorporated dozens of community members within the performances; made thousands of tickets available either free or at significant discounts to seniors, students, community groups and other individuals

in need of access; and sent touring artists to mini-performances, workshops and master classes attended by thousands of Missouri seniors and youth.

KBIA's award-winning news reporting team received recognition in FY 2010 with

- five regional Edward R. Murrow Awards, with two going to student reporters who competed against professionals at other stations;
- one national award, while again dominating the nine regional radio student awards given by the Society of Professional Journalists;
- two (of only four) Public Radio News Directors Institute student awards; and
- two Missouri Broadcasters Association on-air personality awards.

Mindful of the growing reliance — especially among younger, news-oriented listeners — on new media, KBIA continues to seek not just new ways to disseminate locally generated content, but also new partnerships with NPR and other national providers to establish the public radio brand across as many platforms as possible.

**The Labor Education Program worked with 100 supervisors and shop stewards from Noranda Aluminum Co. and the United Steelworkers to help implement alternative methods for dispute resolution, and to enhance workers' economic security and more competitively position Missouri businesses.**



**The Romeo Corbeil/Gilles Beauguard Summer Camp attracts teens from across the nation. To understand the role of organized labor in society, teens form their own union and negotiate a contract with counselors. More than 200 campers from 20 states and four provinces have participated in the innovative and nationally recognized camp since its inception.**

**M**U Extension's Labor Education Program continues to develop innovative labor-management educational collaborations that benefit Missouri industries. By working with members and leaders of Missouri's workforce organizations, the program helps their leaders to become effective representatives in their workplaces, and to be informed and active participants in their communities.

Missouri's continued economic crisis has challenged traditional leadership styles. And a slow-paced labor market recovery has shifted the educational needs of many organizations. Leaders must pursue new strategies for economic survival and enhanced

competitiveness.

In response, the Labor Education Program has increased efforts to help workers and their organizations. During FY 2010, the program helped organizations develop collaborative labor-management strategies for maintaining workers' economic security while also improving employers' competitive positions.

Last year, the office conducted 39 programs with a total of 1,079 participants, working with both labor organizations and joint labor-management training programs. Faculty members created and delivered a variety of classes designed to enhance union leaders'

representational skills and to build a greater understanding of industry trends and developments.

One notable collaborative educational program is a new series of classes for United Steelworkers Local 7686 and the Noranda Aluminum Co. in New Madrid. All shop stewards and supervisors were provided with 14 hours of instruction over six weeks, designed to assist in improving on-floor relations between the company and union. Participants studied alternative methods for resolving conflict both with grievances and when implementing changes in work organization.

Faculty continued working with other MU units, including the Osher Lifelong Learning Institute, the Asian Affairs Center, the Center for Sustainable Energy and Nursing Outreach, to develop and deliver labor education content relevant to their missions.

**One of the Labor Education Program's largest annual efforts is the Summer Institute of District 11 of the United Steelworkers union. This year, the institute brought together 122 participants from a four-state region for a week of instruction at the Lake of the Ozarks, located in MU Extension's South Central Region.**

# Law Enforcement Training Institute

Von Pittman, PhD, interim director

leti.missouri.edu

**During FY 2010, 112 recruits graduated from three Law Enforcement Training Institute basic academy classes. MU-trained candidates consistently achieve higher median scores than the statewide average on the Missouri Peace Officer Standards and Training licensing examination.**



His classmates call him Gramps or Grandpa. Dorie Clark, 65, foreground, is the oldest of 8,100 trainees in the 50-year history of MU Extension's Law Enforcement Training Institute.

By providing local and state agencies with access to experienced and knowledgeable law enforcement personnel, MU Extension's Law Enforcement Training Institute helps ensure the safety and protection of Missourians.

Since 1948, the institute's faculty and affiliated professionals have provided basic pre-service and specialty in-service instruction to both recruits and veteran officers who serve public safety agencies at the local, state and national levels. Many graduates go on each year to become certified to train others in their respective departments.

During FY 2010, the institute served 444 students from 51 Missouri counties and the city of St. Louis, as well as 326 students from 36 other states and Washington, D.C.

In addition to hosting three basic academy classes that graduated 112 recruits, the institute provided continuing education to 770 law enforcement professionals. The more than 30 public safety professional education programs covered topics ranging from firearm instruction and drug enforcement to controlling domestic violence situations and combatting

racial profiling.

The institute continues its 20-year charge to increase the proficiency and prevalence of animal welfare professionals nationwide through its renowned animal cruelty investigation programs. In FY 2010, the faculty held 12 such schools and workshops in 11 states, attended by 247 humane and animal control officers, attorneys, shelter managers, volunteers, administrators, state and local abuse investigators, and pet enthusiasts.

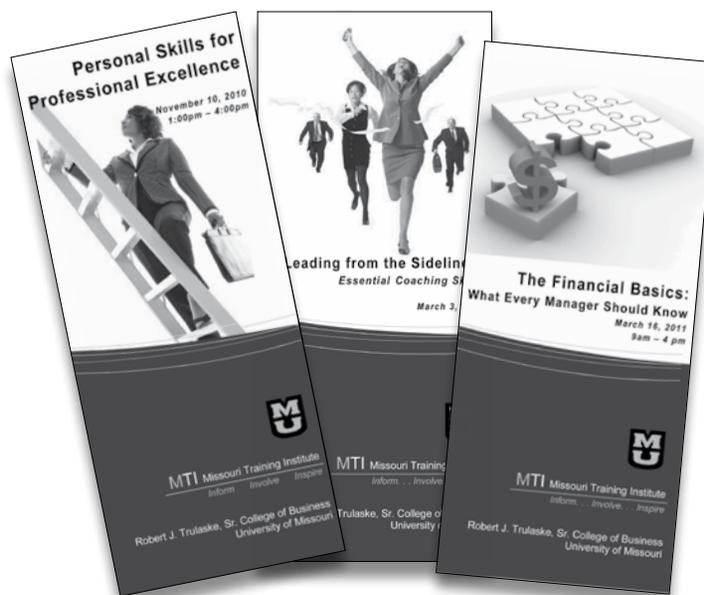
## To protect and serve.

**Camden and Cole counties in the South Central Region are consistently among the top 10 Missouri counties served by the institute's basic academies, continuing education programs and National Cruelty Investigations Schools. Since 2004, the region also has contributed 10 of the 108 Missourians who were trained while serving with the U.S. armed forces as national guardsmen, active duty military, reservists and veterans.**

**The institute delivered 392 noncredit business education courses in FY 2010, serving 9,141 people from all Missouri counties with 43,056 total hours of instruction.**

The Missouri Training Institute, operated as a partnership between MU Extension and the Robert J. Trulaske Sr. College of Business, provides training and consulting services to help improve job performance and organizational success. Customers include business and industry, government, education organizations, professional associations and other for-profit and nonprofit groups across the state.

State government agencies historically have turned to the institute to provide training that they are not staffed to offer in-house. Once 100 percent grant-funded, the institute set a goal several years ago to expand its customer base and create a better balance between fee- and grant-funded services. In FY 2010, fee-for-service activity grew 6.25 percent among both new and returning customers. At the same time, a declining state budget resulted in a 10.5 percent



reduction in grant-funded services and an overall revenue decline of almost 3 percent.

Despite economic challenges, demand for services actually increased during the year. The number of courses provided was up 18 percent, people served up 20 percent and hours of instruction up 8 percent.

Human resources professionals who participate in the institute's two 12-week training programs to prepare for the Society of Human Resource Management's certification exam continue to pass the test at a rate far exceeding the national average. Over the past decade, that pass rate has averaged above 80 percent, compared to a 57 percent national average.

Other highlights included

- offering leadership training for the lead attorneys in the Missouri Attorney General's Office;
- providing strategic planning and leadership training for the Missouri Ethics Commission;
- managing the Missouri Association for Court Administrators' annual conference, which drew more than 300 participants;
- offering two open-enrollment supervisory training programs that attracted staff from mid-Missouri businesses;
- continuing its partnership with MU Human Resources to offer training to MU supervisors (Originally designed for Campus Dining, Residential Life and Campus Facilities, the program was opened to supervisors from all MU departments in FY 2010.);
- sponsoring best-selling author Stephen M.R. Covey in a presentation about his book *The Speed of Trust* to more than 200 participants; and
- delivering 112 days of training to staff of the Missouri Department of Social Services as part of their supervisory requirement.

**“I just want to tell you that I am very pleased with how our conference went this year, and especially how you managed everything. You have helped us to make some significant improvements over the past two years. I love how easy it is to work with you — you’re so quick on the uptake, calm, thorough and take the initiative when that’s the right thing to do.”**

— Client testimonial

The MU Conference Office plans and manages all facets of noncredit, face-to-face educational meetings, providing professional, comprehensive services to the University’s academic and administrative units, state and federal agencies, business, and professional and nonprofit associations.

During FY 2010, the office collaborated with the UM System and all four campuses, eight MU schools and colleges, 18 administrative units, six federal and state agencies, and 17 other organizations to deliver 72 conferences. Those events, attended by 21,852 people, generated \$5.4 million in gross revenue.

Conferences provide for the transfer of knowledge with personal interactions and relationship-building experiences, resulting in stronger, more productive connections. In *Forbes* magazine and Harvard University studies, 80 percent of respondents recognized that face-to-face interaction leads to teamwork, and 69 percent saw meetings as places to consider critical issues.

The Conference Office plays a key role in MU’s land-grant mission by bringing the University to the citizens. While the staff can manage event venues anywhere in the world, a sizable percentage of its meetings take place in Columbia and on campus. Visitors are exposed to the community’s academic and cultural richness, which can produce longer-term benefits to the University and mid-Missouri area.

For example, MU’s Thompson Center for Autism and Neurodevelopmental Disorders held its fifth annual Autism Intervention Conference in April at Columbia’s Holiday Inn Executive Center. More than 400 experts and families gathered to share up-to-date assessment and intervention strategies supported by

research. For families affected by autism spectrum disorders, the event offered an opportunity to come together and find support through others. Participants received information on current trends in the diagnosis and treatment of autism and also viewed research posters and vendor displays.

Among other on-campus events to which the office lends expertise and service are youth camps and activities that draw high school — and prospective Mizzou — students and other visitors to Columbia. Revenue generated for MU departments and offices by local activities exceeded \$1.3 million in FY 2010, in addition to the economic benefit provided for hotels, restaurants and retail establishments on the part of out-of-town attendees.

MU Division or Program	Number of Activities	Attendance Total	Indiv. Hours Instruction	Student FTE*
Arts and Science	1	65	15	3.3
Agriculture, Food and Natural Resources	19	5,466	399	365.5
Education	1	433	16	23.1
Engineering	3	243	89	13.9
4-H Youth Development	2	374	33	21.1
Fire and Rescue Training Institute	2	2,248	52	136.5
Human Environmental Science	1	80	32	8.5
Journalism	3	149	37	7.2
Medicine	2	551	42	42.7
MU Administration	7	2,758	179	153.8
Osher Lifelong Learning Institute	4	715	54	40.6
Veterinary Medicine	3	197	18	5.0
Vice Provost's Office	1	79	11	2.9
Conference Office-hosted	23	8,494	575	722.7
<b>Conference Office Totals</b>	<b>72</b>	<b>21,852</b>	<b>1,552</b>	<b>1,546</b>

\* Student FTE = Student Full-time Equivalent

# Nursing Outreach

Shirley J. Farrah, PhD, RN-BC, director and assistant dean, Sinclair School of Nursing

[nursingoutreach.missouri.edu](http://nursingoutreach.missouri.edu)

**“The academy has taught me the importance of being a leader and not just a manager. ... It is about educating your staff, giving them the opportunity to make a mistake and learn from it, and involving the whole team in the process for the betterment of the patients, staff and organization!”**

— Sarah Arnold, assistant director of nursing at Bethesda Health Group in St. Louis, and May 2010 graduate of the MU Leadership Development Academy for Registered Nurses in Long-term Care



**University of Missouri Extension and MU Sinclair School of Nursing show nurse practitioners in rural communities what it takes to set up and run a successful health clinic. Every year more than 3,000 registered nurses receive training and certification through MU Extension programs.**

**M**U Nursing Outreach is the primary university-based provider of continuing nursing education in the state. The faculty provides face-to-face, online and telecommunicated educational programs for nurses and other health-care professionals throughout Missouri, nationally and internationally.

The office is recognized as a leader in offering quality, affordable lifelong learning opportunities for registered nurses, regardless of their specialty, practice setting, academic preparation or geographic

location. With a 50-year history and state and national accreditation, the office stays on the leading edge by offering evidence-based programs with a strong focus on nursing practice. Nurses from 90 Missouri counties and the city of St. Louis attended the office's programs in FY 2010.

The office serves a predominantly rural audience, with nine of 10 of Missouri participants residing outside the St. Louis and Kansas City metropolitan areas.

Nursing Outreach provides a variety of multidisciplinary programs through cooperative relationships

with organizations involving social workers, dietitians, veterinarians, nursing home administrators, occupational and physical therapists, emergency medical technicians, physicians, psychologists, health educators, school counselors, addiction counselors and health educators. In addition to the office's own educational activities, which attracted 1,788 participants, another 955 nurses participated in programs co-sponsored with MU Extension's Office of Continuing Medical Education.

Highlights from the year's efforts included the International Society for Anthrozoology and Human-Animal Interaction Conference, held in collaboration with the MU Research Center for Human-Animal Interaction; the

MU Leadership Development Academy for Registered Nurses in Long-term Care; the third annual Evidence-Based Practice on the Frontline: Building a Culture of Quality, Safety and Nursing Professionalism conference, designed for nurses who are directly involved in patient care; and the National Bioterrorism Hospital Preparedness Program, which attracted a statewide audience of doctors, nurses and emergency responders through a series of five interactive-TV seminars.

**In FY 2010, the Osher Lifelong Learning Institute moved into a new facility and partnership with the Columbia Parks and Recreation Department to offer classes at the Stephens Lake Activity Center, which can accommodate more than 75 participants at a time.**

In its seventh year of bringing hands-on and thought-centered learning opportunities to individuals age 50 and older statewide, the Osher Lifelong Learning Institute at MU served 473 individuals with 61 practical skills-based courses and intellectually challenging study topics, such as *Financial Guidance for the Seasoned Adult*, as well as *China in 2050* and Milton's *Paradise Lost*.

As the first program of its kind based at a Missouri higher education institution, the institute continues to serve as an unmatched resource for the state's older adult populations, whether they reside in Columbia or rural communities around the state served by interactive television.



**Chinese Cuisine — With a Midwestern Twist** was just one of more than 60 wide-ranging courses that encompassed both practical skills and intellectual enrichment for “seasoned” adult learners enrolled at the Osher Lifelong Learning Institute during FY 2010.



**The Stephens Lake Activity Center — new home of Osher Lifelong Learning Institute classes.**

Despite the economic downturn that continued in FY 2010, enrollments were stable in comparison to

the previous year, indicating that students see the institute as a valuable investment of their time and often limited incomes. To encourage risk-free participation among potential students, the institute kept its popular brown-bag seminar series, Friday film festivals and a number of educational tours open free to interested non-members.

Reflecting MU Extension's charge to bring research-based information and education to Missourians, the program recruits many of its instructors from the University. These volunteer faculty members provide quality course offerings that can make a difference in the lives of the participants through personal enrichment, group participation, interpersonal interaction and the sense of

being an active player in society.

The MU Retirees Association president and president-elect continue to volunteer on a permanent rotating basis for the institute's advisory council, which comprises 20 members who provide information, guidance and advocacy for MU retirees' personal enrichment needs and recognition for the benefits of lifelong learning for all Missourians.

# Veterinary Medical Extension and Continuing Education

Craig Payne, DVM, director

vmth.missouri.edu

**Throughout FY 2010, MU Extension's veterinary medical faculty directly reached more than 3,000 professionals at 60-plus educational events offered across Missouri.**

**T**apping into a wealth of economic, scientific and marketing expertise, MU Extension's veterinary medical faculty members develop continuing education and outreach efforts in partnership with extension specialists, as well as MU faculty and researchers. A primary goal is to bring together large- and small-animal veterinarians and allied industries with livestock producers, companion animal owners and interested members of the public on issues of common concern and mutual benefit.

During FY 2010, MU Extension faculty addressed issues affecting Missouri's livestock industry and provided up-to-date research on livestock production best practices, disease management and technologies for improving food safety. They reached producers, veterinarians, Missouri National Guard agribusiness development team soldiers and representatives from the countries of Georgia and Kazakhstan.

Committed to ensuring the growth and sustain-



**Craig Payne, DVM, left, director of Veterinary Medical Extension and Continuing Education, and John Middleton, DVM, associate professor of food animal medicine, field questions in April 2010 during a training session with the soldiers of the Missouri National Guard agribusiness development team prior to their deployment to Nangarhar, Afghanistan.**

ability of the state's animal resources, the office works with researchers to expand marketing opportunities for small- and medium-sized beef producers. In addition, faculty conducted research to assess veterinary learning preferences so information can be distributed more effectively. They also collaborated with other MU faculty to develop a real-time decision-making tool to mitigate effects of public health emergencies.

On the small-animal side, faculty provided five continuing education events for graduate veterinarians seeking continuing education credit to validate their veterinary licenses. These events provided the latest information in medicine and surgery.

## MU Extension veterinarians — serving veterinarians, saving livestock

Veterinarians face a growing problem statewide with trichomoniasis, a disease that affects cattle herd fertility. In the first six months of 2010, the number of herds testing positive for the disease exceeded that of the previous six years combined. A single Missouri producer easily could lose more than \$10,000 if this disease infects an average-size herd of 40 cows.

In response to this threat, MU Extension veterinarians

and the Missouri Department of Agriculture presented workshops to nearly one-third of the state's livestock veterinarians, who learned how to diagnose and prevent this costly disease. Other MU Extension-sponsored events and publications informed cattle producers about how to avoid introducing the disease into additional herds.

**MU Direct offers 68 degree and certificate options and individual courses from 11 Mizzou schools and colleges. In FY 2010, online learners comprised 27 percent of MU's graduate-level enrollments.**

By providing adults with online access to the University's educational programs, MU Direct: Continuing and Distance Education helps thousands of students each year acquire the knowledge and skills necessary to advance their careers and fulfill their dreams.

Online learning has transformed the way students learn, and current technologies have removed the barriers of time and place to provide adults access to quality MU academic programs, whether they're living in rural Missouri or Cape Town, South Africa; working full time or as a stay-at-home parent; taking an individual course; or completing a bachelor's, master's or doctoral degree.

In FY 2010, MU Direct recorded 9,961 enrollments in 786 university courses, an increase of more than 14 percent from the previous year. Online learners comprised 27 percent of all MU graduate-level enrollments, 39 percent of its master's enrollments and 71



**Gretchen Kassel, first-grade teacher in Wentzville, earned an online master's in educational technology in May 2010. Kassel, who was interested in improving her school's use of technology, found the online master's program from Mizzou's School of Information Science and Learning Technologies at just the right time. "I was already known for trying new things with computers, so the program was a good fit for me," she said. "Now, I probably push more for new technologies with the other teachers, and I'm not afraid to try new approaches with my students."**

percent of educational specialist enrollments. In addition, approximately 500 graduates were recognized in the annual virtual graduation ceremony, hosted on the MU Direct website.

Schools and colleges that offered educational opportunities in an online format during FY 2010 include the College of Agriculture, Food and Natural Resources; College of Arts and Science; Robert J. Trulaske Sr. College of Business; College of Education; College of Engineering; School of Health Professions; College of Human Environmental Sciences; School of Journalism; School of Medicine; Sinclair School of Nursing; and Truman School of Public Affairs.

Interactive semester-based courses allow students to participate in stimulating educational experiences with others. Interactions with peers and instructors occur in small- and large-group discussions, as well as through class projects.

MU Direct promotes academic success by assisting students with their concerns, networking them with the Mizzou campus that they may never have the opportunity to visit and by communicating with them regularly via e-mail and phone to make sure they are not experiencing difficulties. As one student said about MU Direct this year, "I was late in enrolling, and your staff knocked themselves out to help me. 100 percent excellence!"

**The Center for Distance and Independent Study amassed 19,070 enrollments during FY 2010 at the university, high school and elementary/middle school levels from students in Missouri, across the U.S. and in 50 other countries.**

**A**fter 99 years, MU Extension's Center for Distance and Independent Study prepares to celebrate its centennial of providing educational opportunities to students at a distance by reflecting on its evolution from a print-based, correspondence course provider to a comprehensive online education delivery system.

Since 1911, the center has responded to students' changing demands in what has become a constantly changing educational marketplace. Today, the latest technologies allow for online enrollments and course access year-round at any hour of the day. With a team of student services staff, course designers and faculty, CDIS uses collaborative expertise to extend the resources of three University of Missouri System campuses to residents statewide and beyond.

One effect of the recent economic downturn is that increasing numbers of unemployed and under-



**"I chose MU because of its reputation and that I would get a good degree from a reputable university. The flexibility is what enticed me to go back to school. I have a busy life, but it worked." — Kristi Fletcher, bachelor of general studies graduate, 2010**

employed Americans are returning to school to earn additional credentials. Distance learning increases educational opportunities for students who need to remain in the workforce while enhancing their skills. Because they extend the physical boundaries for learning, mobile technologies are changing the educational landscape worldwide.

In addition to college-level courses, the center houses MU High School, which provides students the flexibility of 200-plus course offerings and the

option to earn their diplomas online. A variety of self-paced and semester course options meet needs ranging from credit recovery to gifted programming. In addition, Advanced Placement® courses allow students to select from a more challenging curriculum in fine arts, language arts, mathematics or social studies. The University Professional and Continuing Education Association recognized *AP Art History* with its 2010 Meritorious Award for K-12 distance-learning courses.

While most enrollments come from students enrolled in brick-and-mortar high schools, traditional-age students aren't the only ones who benefit. Through an agreement with Barnes-Jewish Hospital in St. Louis, 30 adult employees there have begun working to complete their diplomas. In FY 2010, MU High School graduates included 95 students from around the world, ranging in age from 11 to 44. Building on a 30 percent overall increase in university enrollments since 2007, the FY 2010 growth rate of 18 percent demonstrates how the program continues to attract students who seek high-quality, flexible courses that suit their schedules. In all, 58 percent of the center's more than 19,000 enrollments came from outside Missouri, representing a significant revenue contribution to both the University and the state from distance education in the form of online independent study.

In 2009, MU Extension began an initiative to link more Missourians with University research and to develop educational programming that addresses critical issues in the state's metropolitan areas.

Urban impact teams, made up of MU, UMSL and UMKC researchers, extension faculty and community partners, studied the challenges faced by the state's inner cities. Health disparities emerged as the single most widespread community-centric issue.

"People thrive when they live in communities with parks and playgrounds, grocery stores selling nutritious food and neighbors who know one another," according to the Convergence Partnership, a nationwide, multi-organization steering committee focused on collaborative research, outreach and activities to create environmental and policy change. "Without a healthy environment, people are more likely to suffer from obesity or one of the many chronic diseases affecting the United States (including) diabetes, asthma and heart disease."

To reduce health disparities among low-income and underserved populations in St. Louis, Kansas City and Springfield, the teams strategized ways to assess the health status of those residents. A divide-and-conquer tactic enabled each team to explore a different, but related, strategy they could share with each other.

Although MU Extension's statewide coordinating team organizes the work in all three cities, each local initiative has its own distinct leadership and focus,

**"Where you live, work, go to school and play can hinder or enhance good health. Place affects health, and not all places have equal access to environments where healthy choices are available."**

**— Kara Lubischer, community development specialist, East Central Region**

and is designed to address community-specific issues.

## **Kansas City**

**Health-care access:** The Kansas City team is investigating ways to improve health-care access by developing educational strategies to promote preventive care, coaching and managed self-care for people with both acute and chronic disease conditions.

In addition, MU Extension serves the urban initiative in Kansas City through programs such as Eating From the Garden (see front cover photo). This youth nutrition and gardening education program encourages fourth- and fifth-grade children to eat more fresh fruits and vegetables and to experience the fun of growing healthy foods, as well as helping to start and maintain gardens.

## **St. Louis**

**Healthy communities:** The St. Louis team is exploring strategies related to building healthy communities, focusing on place-based indicators where

people live, work, learn and play that can promote good health.

The St. Louis group has identified three intervention strategies: 1) develop a healthy corner store initiative that will improve access to fresh, healthy and affordable foods; 2) place a value on community gardens and expand on a 2003 community garden study; and 3) develop a "healthy housing" education project to help residents address issues related to lead, mold, air quality, pests and hazardous substances.

## **Springfield**

**Workforce development:** The Springfield steering committee is exploring strategies to enhance the quality and quantity of health-care employees in the workforce, specifically through promoting cultural competency and diversity.

The committee's recommendations, all related to cultural competency and diversity, include measuring health-care leaders' perceptions and the availability of existing training in these areas; promoting resource allocation for their adoption; better understanding consumer and employee perceptions; developing an awareness and public education campaign; reporting to community leaders, agencies, organizations and the media to assist in policy practices and programs; and developing patient-centered-care training programs for employees that address needs uncovered by the initial assessments.

# MU Extension Statistical Data

## Summary of Continuing Education Noncredit Activities FY 2010

Continuing Education Unit	Number of Activities	Attendance Total	Individual Hours of Instruction	Student FTE*
Center for Distance and Independent Study	16	3,023	324	48.8
Continuing Medical Education	1,151	17,291	1,841	124.0
Fire and Rescue Training Institute	755	18,143	12,538	1,048.2
Labor Education	39	1,079	298	23.9
Law Enforcement Training Institute	42	770	2,828	277.2
Missouri Training Institute	392	9,141	1,744	143.5
MU Direct: Continuing and Distance Education	11	100	419	18.1
Nursing Outreach	56	1,788	307	65.8
Osher Lifelong Learning Institute	144	2,469	766	48.5
Veterinary Medical Extension and Continuing Education	13	656	105	45.8
MU Conference Office**				
Arts and Science	1	65	15	3.3
Agriculture, Food and Natural Resources	19	5,466	399	365.5
Education	1	433	16	23.1
Engineering	3	243	89	13.9
4-H Youth Development	2	374	33	21.1
Human Environmental Sciences	1	80	32	8.5
Journalism	3	149	37	7.2
Medicine	2	551	42	42.7
MU Administration	7	2,758	179	153.8
Vice Provost	1	79	11	2.9
Conference Office-hosted	<u>23</u>	<u>8,494</u>	<u>575</u>	<u>722.7</u>
Conference Office totals	63	18,692	1,428	1,364.7
<b>TOTALS</b>	<b>2,682</b>	<b>73,152</b>	<b>22,598</b>	<b>3,208.5</b>

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

\*\* 9 other MU Conference office activities with attendance totaling 3,160 have been distributed among their related academic areas and are represented in the MU Extension unit totals in this table. See Page 17 for the summary of all MU Conference Office activities by MU division or program.

## Educational Contacts Cooperative Extension — FY 2010

Program Area	Direct Contact Total	Indirect Contact Total	Total Contacts
Agriculture and Natural Resources	99,096	174,142	273,238
Human Environmental Sciences	288,599	155,508	444,107
Business Development	35,876	381	36,257
Community Development	32,173	13,595	45,768
4-H Youth Development	119,515	163,785	283,300
<b>Totals:</b>	<b>575,259</b>	<b>507,411</b>	<b>1,082,670</b>

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.

### Hunger Challenge feeds Oregon County families

MU Extension's community development education helped Oregon County residents tap into local strengths and University resources when they needed to address hunger in the short term.

Working with extension specialists, the Community Foundation of the Ozarks, along with Wal-Mart and the Ozarks Food Harvest, came together to set up the Million Dollar Hunger Challenge in the Ozarks. The Oregon County Community Foundation, an affiliate of the Ozarks foundation, took up the challenge and raised \$5,000 locally between January and June 2010.

The \$5,000 leveraged an additional \$5,000 from the Community Foundation of the Ozarks and allowed the Oregon County Food Pantry to purchase the equivalent of \$50,000 in food through the Ozarks Food Harvest. In addition to helping families, the effort created awareness and commitment to address the county's hunger problems, which are ranked fifth statewide.

## MU Extension FY 2010 Credit Course Offerings

	Head Count	Number of Courses	Number of Enrollments	Credit		SFTE*	
				Undergrad.	Graduate	Undergrad.	Graduate
<b>MU Direct: Continuing and Distance Education</b>							
College of Agriculture, Food and Natural Resources		41	240	363	241	15.1	13.4
College of Arts and Sciences		42	888	2,578	75	107.4	4.2
College of Business		5	147	441	0	18.4	0.0
College of Education		383	5,839	621	16,059	25.9	892.2
College of Engineering		5	46	122	7	5.1	0.4
College of Human Environmental Sciences		90	449	444	805	18.5	44.7
Graduate School							
Nuclear Engineering		8	15	30	15	1.3	0.8
Public Health		5	53	0	159	0.0	8.8
School of Health Professions		35	137	382	0	15.9	0.0
School of Journalism		31	303	0	757	0.0	42.1
School of Medicine (Health Management and Informatics)		30	407	0	1,218	0.0	67.7
School of Nursing		108	1,423	1,555	2,850	64.8	158.3
School of Public Affairs		2	10	0	30	0.0	1.7
School of Veterinary Medicine		1	4	4	0	0.2	0.0
	(1403 -ug / 2785 -gr)						
<b>Subtotal of courses through MU Direct***</b>	<b>4,188</b>	<b>786</b>	<b>9,961</b>	<b>6,540</b>	<b>22,216</b>	<b>272.6</b>	<b>1,234.3</b>
<b>Center for Distance and Independent Study (CDIS)</b>	(2686 -ug / 193 -gr)						
<b>University level</b>	<b>2,879</b>	<b>184</b>	<b>3,860</b>	<b>11,054</b>	<b>633</b>	<b>461.0</b>	<b>35.2</b>
<b>Grand total of university-level credit courses</b>	<b>7,067</b>	<b>970</b>	<b>13,821</b>	<b>17,594</b>	<b>22,849</b>	<b>733.6</b>	<b>1,269.5</b>
CDIS high school level**	5,626	262	10,211				
CDIS elementary level	891	62	2,156				
<b>Grand total of all credit courses</b>	<b>13,584</b>	<b>1,294</b>	<b>26,188</b>				

Fiscal year 2010 represents data for summer 2009, fall 2009 and spring 2010.

\* SFTE = Student full-time equivalent

\*\* CDIS' MU High School awarded 95 diplomas and offered 5,105.5 high school units to 1,702 SFTE in FY 2010.

\*\*\* 356 MU In The Evening enrollments are included in the 2010 total for the appropriate school or college.

## Missouri University of Science and Technology

**M**issouri S&T's Office of Technology Transfer and Economic Development and its Small Business and Technology



Development Center continued to expand their activities, particularly in programs related to student entrepreneurship and economic development.

In April, the Office of Technology Transfer and Economic Development officially opened its student business incubator as part of the effort to encourage and support entrepreneurship among the student body. The incubator provides select student businesses with space to conduct operations and with comprehensive business coaching and mentorship. Its first student start-up was the Interdisciplinary Design Collaborative, whose owners also were selected as the 2010 UM System Student Entrepreneurs of the Year (see front cover photo). Michael Orlando, Colby Hall and R.J. Miller started their company as undergraduates, based on the model of identifying projects beneficial to society and pursuing them using student employees to complete the work. The business focuses on

developing iPhone applications, including BarCodeScan and seven other programs. Throughout the first year of operation, they employed as many as

40 students part time, winning several contracts for videotaping, plus a U.S. Environmental Protection Agency-funded Small Business Innovation Research grant.

Missouri S&T broke ground for a new research park, called Innovation Park. The general purpose office building, scheduled for completion in fall 2010, will provide roughly 18,500 square feet of suites and shared office space for tenants.

Also during the year, the SBTDC hosted several training conferences, including the second annual Rolla Regional Business Conference. The office counseled 48 distinct clients, including assistance in pursuing 26 research proposals and investments, winning \$6,488,063. The Tech Transfer Office received 34 invention disclosures, filed 26 patents and executed nine licenses and options. Currently, 27 active licenses generate \$426,000 in income for the inventors and Missouri S&T, an increase in income of 344 percent over five years.

## Lincoln University

**L**incoln University Cooperative Extension continues to reach underserved individuals across the state with educational resources and programs in St. Louis, Kansas City and Southeast Missouri, and through the main office in Jefferson City.

Individuals and families with limited resources are the priority audience for these efforts. From the field staff to state specialists to the administration, programs improve the standard of living for clients by disseminating research-based education and offering hands-on training to thousands of Missourians.

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-level leadership for the vegetable and the small-ruminant (sheep and goats) programs delivered by regional special-



ists, regional and area educators, and program assistants at the local level.

Highlights of the outreach efforts include the Institute on Minority Aging; workshops focused on waste reduction, home composting and energy conservation; field days that incorporate 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 Missouri's small farmers and ranchers, especially those who are socially disadvantaged and underserved, raise production efficiency while taking good care of the soil, water and environment.

## University of Missouri-Kansas City

**T**he UMKC-MU Extension partnership actively brings together the strengths of both organizations through programming that supports



laborative to help area faith-based and community nonprofit organizations to promote effective social change. More than 70 core urban

community and state. By focusing on “participatory action research,” the partnership brings research to daily life. This past year’s targeted projects supported the urban core.

The UMKC Institute for Human Development supported urban mission initiatives last year by

- moving to a new, more central location with state-of-the-art capabilities for tele- and video-conferencing and space for training, lectures and classes;
- creating programs to promote health-care access and self-management techniques to area underserved communities. A newly developed socio-ecological framework helps local health agencies give individual patients with chronic diseases more control over accountability for their health;
- partnering with the UMKC Bloch School’s Midwest Center for Nonprofit Leadership on the Greater Kansas City Compassion Capital Fund Col-

laborative to help area faith-based and community nonprofit organizations to promote effective social change. More than 70 core urban

- supporting community inclusion for underserved populations through Alianzas, which facilitates partnerships with Hispanics and Latinos. Alianza’s Cultural Academy helps community development professionals reflect cultural diversity in programming;
- leveraging financial support through \$8.5 million in grants to support urban mission and extension programming;
- providing programs on caregiving, mental health and nutrition in the context of aging, including new nutrition programs for baby boomers, those age 85-plus and their caregivers; and
- supporting small businesses and technology venture firms with analysis, consultation and training for confident growth. The Mentoring Program helps CEOs more effectively run their businesses, and the Second Stage Programs benefit key leaders of such businesses.

## University of Missouri-St. Louis

**U**MSSL partners with MU

Extension to meet the needs of residents in the St. Louis metropolitan area and statewide.



Extension efforts

are coordinated through the Community Partnership Project.

During the last year, the Community Partnership Project neighborhood initiatives helped to strengthen community organizations, increase access to local and healthy foods, revitalize business districts, rehabilitate housing and improve academic achievement in public schools.

- The Old North St. Louis neighborhood developed a strategy addressing food security and opened the region’s first neighborhood-owned grocery co-op.
- Thirteen Neighborhood Leadership Academy graduates returned to their communities with the skills necessary to develop and sustain leadership, create and implement community improvement initiatives and manage community-building organizations.
- A new Learn and Serve America grant created UMSL Students of Service — engaging more than 400 college

students in service activities in schools and neighborhoods.

- Conferences and seminars linked residents with university resources and explored key

urban issues, including minority health disparities, school efforts to connect students to higher education, community-based organization effectiveness and gang violence.

- An urban impact team composed of MU Extension and UMSL faculty and community partners developed three strategies designed to improve community health.

In addition, UMSL faculty members partner with MU Extension on three other statewide program efforts. The Local Government Partnership serves as a resource through which local government officials can access quality information, help and training. The MY LOGO program teaches students about local government and involves them in community issues. The Small Business and Technology Development Center at UMSL provides training and technical assistance for new and existing businesses in the region.

# Growing Distance Education — from correspondence courses to online degrees

For almost a century, MU Extension has delivered educational resources to students who cannot travel or relocate to a campus to study and earn credits toward their diplomas or degrees.

Today, thousands of students worldwide make Mizzou their first choice for online courses, as well as diploma, degree and certificate options, through the efforts of MU Direct: Continuing and Distance Education and the Center for Distance and Independent Study (CDIS). With online degree enrollments continuing to increase 18 percent each year on average, it doesn't appear that distance students will give up the freedom and flexibility to learn on their own terms anytime soon.

**In FY 2010, online learners accounted for 27 percent of all MU graduate-level enrollments, including 39 percent of master's degree enrollments.**

Starting in 1911, and for decades following, correspondence study through MU Extension was the only hope many rural Missourians had for earning a quality education from their land-grant university. From the beginning, value emerged as one of the most notable selling points for the idea of "distance education" — particularly as a cost-savings alternative for students in outlying areas who couldn't afford a full semester's tuition.

By the mid-1960s, the independent study program had begun offering computer-based courses. Using the technology of the day to its fullest extent, the

*"I really believe in the program. It was a great experience and really helped me in my career." — Kristi Fletcher, Chesterfield*

Kristi Fletcher, 41, a 2010 bachelor of general studies graduate, owns and operates a sales and marketing business near Chesterfield. She chose the completion program to finish the degree she began 20 years ago.

Fletcher completed 12 courses, including in environmental biology, history, political science and social psychology. She says an online education from MU "is an awesome way to learn. I ended up learning and enjoying it a lot more than I thought I could. I learned more through this process than I previously learned on campus."



*"Finding a program relevant to your career is important. Mizzou's ability to blend research-based knowledge with practical, applicable information is key." — Bill Schneider, St. Louis*

Master of health administration alumnus Bill Schneider is senior vice president of hospital sales at HBE Corp. in St. Louis. Technological advancement in health care is constant, and Schneider, a 2008 graduate, appreciates that Mizzou's online health management program is a leader in that charge. "Most people just assume that all electronic medical records are online and shareable among physicians and clinics," he says. "I work every day to get the industry to that point, and the wonderful thing is that Mizzou is already there."

center introduced the nation's first computerized grading system in 1974, allowing students to submit lessons for grading via telephone modem rather than traditional mail.

**The Computer Assisted Lesson Service was adopted by the U.S. military on more than 80 bases domestically and overseas within a year of its introduction in 1989.**

**From pen and paper to the click of a mouse**

Online instruction was the next revolution. In

1997, the center delivered its first completely Internet courses, soon numbering more than 50. In 1999, MU Direct and the College of Education went online with the University's first online degree, the master of education with a focus in educational technology. Closely following were nursing graduate degrees in public and school health. The center launched its first and only online degree, the bachelor of general studies completion program, in 2004, opening a new opportunity to nontraditional undergraduates.

That same year, the center's secondary education

program achieved accreditation as a diploma-granting institution from the North Central Association of Colleges and Schools to form MU High School. Today, the school enrolls more students than any other individual Missouri high school, with annual enrollments approaching 6,000 students worldwide. Most enrollees attend traditional schools and use MU High courses to supplement their studies.

**Nearly 700 students have graduated from MU High School since its inception in 1999. In FY 2010, ninety-five students from across the globe earned their diplomas through the online program.**

**Responding to societal demand for flexibility without compromising quality**

The number of online programs continued to grow to its current peak of 68 degree and certificate

options representing 11 MU schools and colleges. Nearly 40 percent of all Mizzou master’s-level enrollments each year now come from online students. Individual online courses originate from MU departments, as well as those on the UM-St. Louis and Missouri S&T campuses.

With its academic partners, MU Extension gives nonresidential students access to online versions of the same quality programs offered on campus — reaching thousands of students nationwide and in more than 50 countries.

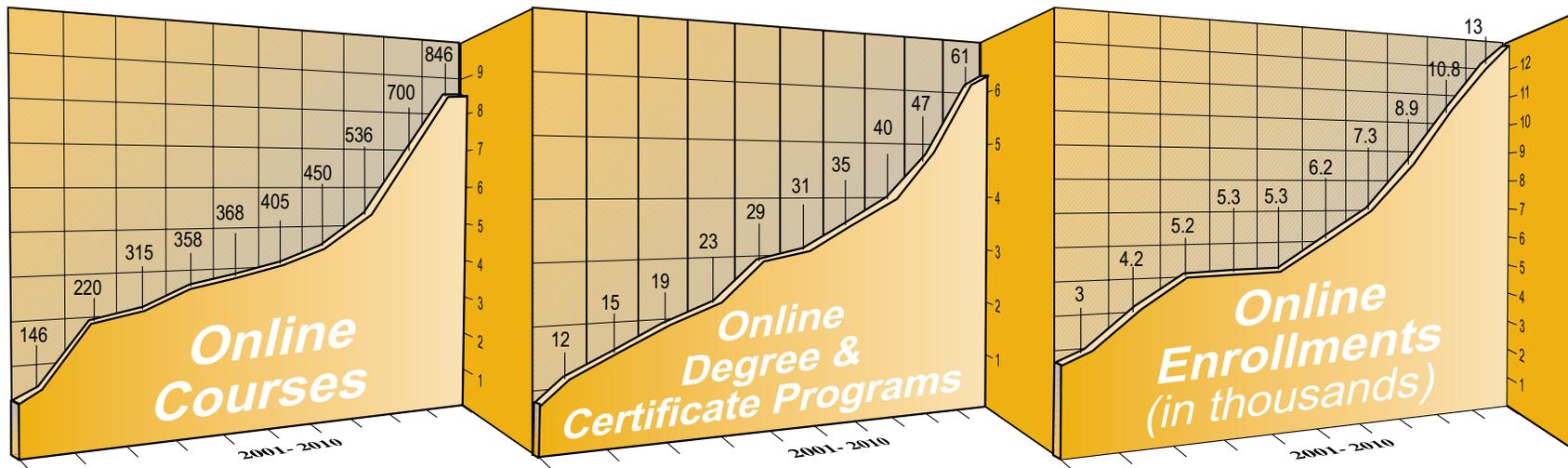
For many of the students served by MU Extension, online offerings are the only avenue to an affordable, quality education.

**From recruitment to graduation**

Student services staff members at MU Direct and CDIS link students with the university and its resources, a liaison function that bridges the gaps

for them in working with other campus offices that are geared primarily for serving residential students. From the student’s initial contact with call center staff to the virtual commencement ceremony, student services help adult learners and other nontraditional students reach the University resources they need most, whether it’s admissions, registration, technology assistance, financial aid, the Online Writers or bookstore.

Distance education has evolved from the paper-bound confines of Industrial Age correspondence study into a mechanized realm of computer-based learning that is a hallmark of the Information Age. Though the format has changed significantly, MU Extension’s commitment to serving Missourians with a quality and affordable education has not.



**Enrollments in MU’s online degree and certificate programs have enjoyed steady growth, averaging 18 percent annually.**

# Growing Missouri's Economy

**M**U's cooperative extension programming fortifies Missouri's economy by providing businesses, communities and residents with access to the latest research, education and information resources, generated on the University of Missouri System's campuses.

Two hundred organizations outside the University partner with MU Extension through grants, contracts and other support to serve Missourians in cost-effective and innovative ways. Carefully leveraging these resources to meet identified needs, MU Extension delivers high-priority programs to help Missouri maintain an economic foothold and to encourage individual financial security and success.

**MU Extension reaches more than 1.2 million Missourians every year with education and training.**

**4-H** — A recent nationwide study of 2,000 adolescents found that 4-H'ers are more likely to take part, perform better and pursue careers in science, engineering and computer technology programs. Young women with 4-H backgrounds also have higher levels of involvement in technology and science programs.

The results prove true in Missouri, where data analysis for Wave 7 of the 4-H Study for Youth Development reveals girls who are active in 4-H after-school and summer programs are also 10 times more likely to be interested in science than their non-4-H counterparts.

**Agriculture and Natural Resources** — Science education opportunities also can be found in our own backyards. MU Extension specialists hosted the

Garden 'n Grow program in six locations throughout Missouri in FY 2010. More than 40 volunteers contributed 472 hours of assistance to 66 school-children, helping them to plant, manage and harvest vegetable plots. More than 400 pounds of produce were donated to local food pantries.

After receiving the training, four of five participants reported that they now understood why it is important to eat fresh vegetables and that they could grow vegetables in gardens on their own.

**Community Development** — Another MU Extension effort addresses both nutrition and community revitalization in an urban area. For more than a decade, MU Extension has partnered with other organizations to give the Old North St. Louis neighborhood a new lease on life.

After decades of decline, the community now is enjoying a dramatic turnaround. Results include \$35 million of redevelopment, including 27 buildings undergoing historic rehabilitation, affordable apartments in nine historic buildings and 20 new homes, and development of historic preservation tools, a bicycle/walking tour, neighborhood DVD and community museum. The availability of healthy foods in what previously was "an urban food desert" actively is being addressed: A neighborhood grocery co-op opened its doors July 1.

**Human Environmental Sciences** — At-risk taxpayers across the state benefit from free assistance, return preparation and filing services through the U.S. Internal Revenue Service's Volunteer Income Tax Assistance program. MU Extension faculty members in family financial education coordinate,

train and support the efforts of volunteers and community-action agencies at 16 sites. In the 2009 tax season, volunteers prepared 3,645 returns, saving clients more than \$729,000 in preparation fees and providing \$4.2 million in refunds for an economic impact of \$10.5 million.

**Business Development** — The Missouri Technology Incentive Program, operated under contract by MU Extension's Missouri Small Business and Technology Development Centers, serves as a force to drive entrepreneurship. Funded by the legislatively chartered Missouri Technology Corp., the program seeks to stimulate technological innovation and transfer, increase federal support and help grow early-stage businesses. Since its inception in April 2008, the program has earned the following achievements:

- 112 Phase 0 MoTIP awards of \$5,000 each received by 68 companies to help prepare grant applications;
- 32 separate Phase I Small Business Innovation Research and Small Business Technology Transfer research awards totaling more than \$4.6 million; and
- a 28 percent success rate at winning awards — nearly double the national average.

Whether it's developing future scientists, ensuring healthy and viable communities, or promoting a stronger workforce, MU Extension programs focus national, state and local resources into growing Missouri's economy.

# MU Extension in South Central Missouri: Healthy Lifestyles



Far left: Students at the New Harmony Christian School tend the newest community garden in the Salem area. This garden and three others were spurred into existence by the Healthy Dent County Initiative, which aims to increase access to healthy foods and promote physical activity in the community.



Above: MU Extension funding helped buy materials to support healthy food demonstrations that coincide with the hours of operation at the farmers' market.

Below: Many of the garden plots are used by people like Gale and Veigh Hogan, who missed gardening after they retired and moved to Salem.

**E**xcitement is palpable at Salem's New Harmony Christian School, especially around garden time.

Armed with watering cans and hoes in hand, students explore the new tomatoes and peppers in one of Salem's newest community gardens, thanks to collaboration between University of Missouri Extension and area organizations.

"The kids love getting out there, getting dirty working in the soil, so it's been a very positive experience," said Kim Edwards, South Central Missouri Community Action Agency coordinator. "Our hopes are that we're producing gardeners to come for the future."

Edwards worked to establish the garden with MU Extension's Healthy Dent County Initiative. "I really

didn't know a lot about gardening at the time, so I turned to Sarah Hultine Massengale, MU Extension community development specialist. She helped us find every sort of resource imaginable," Edwards said. "She found curriculum for the students here at the school, helped us find plans to build our compost bins and connected us with Master Gardeners in the community."

This garden is just part of the already fruitful Healthy Dent County Initiative. The program — started as a pilot for the statewide Healthy Lifestyles Initiative — is in its third year in Dent County, where it connects children as well as adults with the food they eat and tries to instill healthy, active lifestyles that will last long after the project is gone.

MU Extension joined forces with 10 local groups committed to getting the community eating well and exercising. The funding purchased exercise equipment for the Salem Fitness Center and Wii fitness consoles for use in public school exercise classes, and allowed them to pay an AmeriCorps VISTA volunteer to help establish the community gardens.

"We've realized that just having facilities for exercise or fresh produce available isn't enough," said Ray Walden, MU Extension coordinator for the community gardens. "Our community and county have a long history of being independent, and this initiative has provided a vehicle for people who otherwise might not have recognized this problem to make a concerted effort to work together to meet those needs."



Towering above a 250-foot bluff at Ha Ha Tonka State Park, near Camdenton, is the ruin of a turn-of-the-century castle built by a wealthy businessman. And visitors to Missouri's Ozarks enjoy the beauty of rugged terrain and woodlands, as well as prairie grasses and wildflowers. (Photos courtesy of Missouri Department of Natural Resources)

UNIVERSITY OF MISSOURI  
 Extension

108 Whitten Hall, Columbia, MO 65211

573-882-7477 • 1-800-919-5651

*extension.missouri.edu*

UED1009