Your source for practical information on almost anything
January 5, 2017

Dear County Commissioners and Friends of MU Extension:

The past year was a busy one for University of Missouri Extension. As a long-time extension professional and newcomer to Missouri, I have found the support from people like you to be remarkable. Missouri is a special place with a promising future.

Through the efforts of faculty, staff and amazing volunteers, MU Extension connects millions of Missourians with knowledge they put into action in their daily lives. Using a range of learning experiences, we reach people of all ages and backgrounds, in every corner of the state.

In response to direct input received from local councils and the unique nature of each county, extension programs vary slightly across the state. This strength of local flexibility and public engagement enables county-based Mizzou faculty to provide local learning experiences that improve lives and community vitality. For example:

- MU Extension business specialists helped local Missouri businesses achieve sales increases of $186 million while creating or retaining 7,766 jobs.
- Helping assure access to health care in local communities, MU Nursing Outreach made it possible for 2,094 nurses keep their skills up to date.
- Our 4-H youth development specialists and other extension team members worked with volunteers and community leaders to reach 269,000 youths ages 5 to 18 across the state.
- Anticipating the needs of Missouri’s aging farm population, extension faculty developed workshops that target estate planning, succession and retirement planning specific to farmers.

These are just a few examples of how Mizzou’s commitment to extension and engagement benefitted Missourians this past year.

In the interest of better serving Missourians, we are conducting a statewide needs assessment. It will include extensive input from local communities and stakeholders. It will result in stronger alignment between extension programs and local needs.

I encourage you to read the attached annual report from your county office to gain an understanding of how MU Extension has worked this past year to serve your community.

Your support of MU Extension and our efforts in your community is greatly appreciated. As always, I welcome your input on how the University of Missouri can better serve the people.

Sincerely,

Marshall Stewart, Ed.D.
Vice Chancellor for Extension
## Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emily Barbee</td>
<td>M.S. County Program Director</td>
</tr>
<tr>
<td>Darlisa Diltz</td>
<td>MBA, MIT Small Business Development</td>
</tr>
<tr>
<td>Suzanne Gellman</td>
<td>M.S., J.D. Consumer Economics</td>
</tr>
<tr>
<td>Rich Hoormann</td>
<td>M.S. Regional Horticulture</td>
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<tr>
<td>Dana Joerling</td>
<td>M.A. 4-H Youth</td>
</tr>
<tr>
<td>Teresa Mareschal</td>
<td>Ph.D. Child and Family Development</td>
</tr>
<tr>
<td>Alissa Marie Ontiberos</td>
<td>B.S. Family Nutrition Program</td>
</tr>
<tr>
<td>Michelle Stauffer</td>
<td>B.S. Family Nutrition Program</td>
</tr>
</tbody>
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## St. Charles County Extension Funding

Funding is a three-way partnership of federal, state and county governments. Federal and state money, through the University of Missouri, pays for faculty salaries, benefits, training costs and part of the equipment used in the local office. County funds provide for operational expenses as noted below.

### Operational Revenue

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
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<tbody>
<tr>
<td>Beginning Balance</td>
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<tr>
<td>County Support</td>
<td>100,000</td>
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<tr>
<td>Gifts/Grants/Contracts</td>
<td>1,200</td>
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<td>Extension Center Reserves</td>
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<td><strong>Total Revenue</strong></td>
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### Operational Expenses

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<th>Category</th>
<th>Amount</th>
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<tr>
<td>Salaries and wages (2.0 FTEs)</td>
<td>80,252</td>
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<td>Staff benefits</td>
<td>10,094</td>
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<tr>
<td>Travel</td>
<td>4,938</td>
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<tr>
<td>Telephone service</td>
<td>3,603</td>
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<tr>
<td>Marketing/Advertising</td>
<td>684</td>
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<tr>
<td>Supplies/Services</td>
<td>4,798</td>
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<tr>
<td>Utilities</td>
<td>6,862</td>
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<tr>
<td>Contract services</td>
<td>12,213</td>
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<tr>
<td>Insurance</td>
<td>6,452</td>
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<tr>
<td>Miscellaneous</td>
<td>1,159</td>
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<tr>
<td>Repairs/maintenance</td>
<td>2,587</td>
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<tr>
<td>Furniture/equipment</td>
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<tr>
<td><strong>Total Expense</strong></td>
<td><strong>$135,228</strong></td>
</tr>
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## Support staff

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<thead>
<tr>
<th>Name</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan Brown</td>
<td>Support staff, Bookkeeper</td>
</tr>
<tr>
<td>Carol Grote</td>
<td>Support staff</td>
</tr>
<tr>
<td>Mary Lou Krekeler</td>
<td>Support staff</td>
</tr>
</tbody>
</table>
Guiding extension programming

Every Missouri county has an extension council comprised of elected and appointed citizens who guide the local educational programming. Council members are partners in the educational process, from needs assessment through program implementation and evaluation of outcomes.

- Work with regional faculty to determine educational programs for the county.
- Manage finances of local extension operations.
- Secure personnel to carry out extension activities.
- Elect and organize the local extension council.

2016 Extension Council

Donald Van, Jr, Chairman ............................................. St. Peters
Mary Carey, Vice Chair ............................................. St. Charles
Ralph Britton, Treasurer ................................. Wentzville
Mary Medina, Secretary ............................... Lake St. Louis
Betty Fagan ....................................................... O'Fallon
Karen B. Harvey ........................................... Dardenne Prairie
Patti Kolek .......................................................... O'Fallon
Ruth Mellor ....................................................... St. Charles
Steve Martinez ........................................... St. Peters
Kara Roberson ........................................... Wentzville, appointee
Stephen Thompson ........................................ St. Peters
John White ....................................... County Council, appointee
Roy Zirges ................................................ Community Partner
Gabriela Ramirez-Arellano ......................... Community Partner
Fay Aubuchon ................................................ Community Partner

First row, left to right: Don Van, Mary Carey, Mary Medina, Emily Barbee, Darlisa Diltz, Teresa Mareschal, Suzanne Gellman. Back row, left to right: Ralph Britton, John White, Ruth Mellor, Patti Kolek, Dana Joerling, Rich Hoormann.
Developing youth for the future

4-H Volunteers

Volunteers guide 4-H members in becoming productive citizens, outstanding communicators, effective leaders, and successful learners.

In St. Charles County, 170 adult volunteers helped conduct the 4-H youth program in 2016. These volunteers served in a variety of roles including but not limited to 4-H club leaders, project leaders, activity leaders, fair superintendents, and judges.

Missouri 4-H volunteers’ responses to a survey report they contribute an average of 100 hours per year. Valuing their time at $21.31 per hour, based on average Missouri incomes, St. Charles County 4-H volunteers’ contribution was worth more than $362,000 in 2016.

4-H Youth Program

St. Charles County 4-H clubs offer long-term educational experiences in which members learn life skills such as decision making, healthy lifestyle choices, problem solving, public speaking to mention a few.

St. Charles County had 24 4-H clubs with 501 youth from 5-18 years of age in 2016. Under the guidance of adult volunteers, members learn by doing through involvement in over 50 projects. While agriculture- and farming-related projects are still important in 4-H, it is not necessary to live on a farm or raise livestock to be involved. Popular 4-H projects include computers, aerospace, photography, shooting sports and robotics. There are enough project areas in 4-H to offer something of interest for any young boy or girl who wants to join 4-H.

Clubs also involve children and teens in leadership opportunities, community service, camping and educational trips.

4-H Youth are equipped with the knowledge, skills, attitudes and health for the 21st century workforce. Missouri 4-H members spend almost nine times more of their leisure time than peers engaged in projects anchored in science. As a result, 4-H members are three times more likely to pursue science related careers than similar peers (Lerner and Lerner, 2008).

On October 5, 2016, St. Charles County youth joined others from 4-H clubs, groups, and school programs across the country to participate in Drone Discovery, the 4-H National Youth Science Day 2016 Engineering Design Challenge.

Anna Wingbermuehle, of the Harvester 4-H Club, pictured with some of her state fair exhibits. She earned the Susie Steinhoff Inspiration Award at the 2016 St. Charles County Fair.
Working to improve children’s lives

Focus on Kids

Focus on Kids is a court-approved educational program for parents who have filed a motion in Family Court. Parents learn how to nurture and support their children during and after separation and divorce. The overarching purpose of Focus on Kids is to improve the quality of the co-parenting relationship and thus reduce stress and anxiety for children. This leads to more children being raised in a healthy low-conflict environment. In 2016, 241 parents attended Focus on Kids in St. Charles County. Eight-three percent of participants would recommend the program to other divorcing parents.

The most helpful part of Focus on Kids ... was the part that reminded parents to remain neutral during conflict or when your child is upset or questioning the other parent. - Focus on Kids participant

Family Nutrition

MU Extension’s Family Nutrition Education Program (FNEP) reached 16,464 low-income participants with nutrition education in St. Charles County during 2016. FNEP teaches youth about nutrition, food safety and physical activity for lifelong health and fitness. Lessons are taught in kid-friendly terms with hands-on activities such as taste-testing healthy foods and practicing skills that lead to good health.

The FNEP program reaches residents through schools, child-care centers, community organizations and health fairs.

Participants in the YMCA Health Fair held in April, 2016. Image source: St. Charles County YMCA Facebook page.
Quality for Keeps

Appreciation of locally grown food has renewed an interest in home food preservation. Canning, drying and freezing are safe and effective ways to preserve food at home if done correctly. Using outdated or unsafe methods can result in serious illness and even death primarily due to botulism poisoning. Using research-based methods to preserve food at home is critically important.

This year, **61 people** in St. Charles County—twenty percent of them men—attended classes on safe food preservation. Classes on making sweet spreads, canning tomatoes and salsa, pressure canning, freezing and drying were held.

As a result of the program, participants noted that they plan on taking the following actions:

- Preserve food as a result of the session they attended.
- Use tested recipes from reliable sources.
- Share food preservation information with other people.
- Plan to buy or update their equipment.

“The hands-on portion was helpful and allowed me to see what the instructor was talking about. Good class!”

“Well organized classes, enjoyed the hands on opportunities and the final ‘take-homes’. Nice job!” - Food preservation class participants
Encouraging healthy eating

Cooking Matters at the Store

*Cooking Matters at the Store* is a free, guided grocery store tour that provides families with hands-on education as they shop for food, giving them skills to compare foods for cost and nutrition. Participants learn how to plan and budget for healthy, affordable and delicious meals for their families.

During 2016, 14 adults from St. Charles County participated in tours. MU Extension partnered with Operation Food Search, Wal-Mart and Progress Park in Wentzville to offer the program to county residents. As a result of the program, participants indicated they would take the following actions:

♦ Compare unit prices to find the best deals
♦ Read ingredient lists to find whole grains
♦ Compare food labels to make healthy choices
♦ Buying fruits and vegetables in all its forms (fresh, frozen and canned)

“*I didn’t realize the amount of sugar in yogurts or the sodium in canned vegetables and beans.*”

- Cooking Matters at the Store participant

Emily Barbee, Nutrition and Health Education Specialist, teaching cost-saving strategies when purchasing fresh, frozen and canned produce at the store.
Partnersing with the community

Money Smart Week

250 individuals participated in 29 financial education programs in St. Charles County during Money Smart Week, April 23 – 30, 2016.

A collaborative of entities including MU Extension, Community Council of St. Charles County, St. Charles City-County Library District, St. Charles Community College, banks, credit unions, etc. offered a variety of programs during the week on topics such as Money Smart Kids Read, retirement planning, social security, trusts and estates, Medicare, paying for college, small business development, etc. MU Extension faculty chaired the St. Charles County Money Smart Week collaborative.

Money Management

More and more women today find themselves in circumstances where they must make decisions that affect their financial security. The Women’s Financial Education Series (WFES) workshops are designed to promote self-reliance by equipping people with knowledge and skills about money management, credit, insurance, estate and retirement planning.

During 2016, 12 adults in St. Charles County learned about resources and techniques to more effectively make financial decisions, implement financial strategies and increase success in reaching financial goals.

This program benefits St. Charles County in several ways:

1) by increasing the financial stability of its residents, fostering less dependence on public programs; 2) by reducing financial stress, which allows individuals to be more productive on the job; 3) by building skills that result in people who are better equipped to participate as consumers in the local economy.

MU Extension faculty facilitate the series and it is co-sponsored by MU Extension and St. Charles County Community College and supported by organizations such as the United Way, Community Council of St. Charles County, St. Charles City-County Library District, Connections to Success and other community coalition members.

In addition to the workshops, a Facebook presence and blog is maintained to support ongoing financial education for current and past participants of the financial series. Several participants receive on-going financial coaching to support their efforts in working toward their financial goals such as paying down debt, building retirement savings, increasing income and starting college savings accounts for their children.

Website | http://extension.missouri.edu/stcharles
Training residents to gain strength

Stay Strong, Stay Healthy

*Stay Strong, Stay Healthy* is a safe, structured eight-week strength training program designed for middle-aged and older adults to improve strength, balance and flexibility, which will help improve activities of daily living and overall health. Participants are safely guided through a warm up, eight muscle-strengthening exercises and a cool down.

During 2016, **10 people** participated in Stay Strong, Stay Healthy programs in St. Charles County. MU Extension partnered with the St. Charles County Senior Center to offer the class. Participants, at the end of the program, completed a feedback survey and indicated the following:

- 100 percent felt physically stronger.
- **99 percent felt that their health was better because of the program.**
- 100 percent felt they had more energy.
- Since beginning this program, 83 percent have purchased weights or currently own weights at home.

“*My* lower back pain has diminished. Hopefully, will go away as back becomes stronger again.”

- Stay Strong, Stay Healthy participant
Managing land-use and environmental quality

Food and environmental safety

The county’s farmers have local access to the training needed to purchase and use restricted-use crop protectants necessary for profitable crop production. Growers wanting to purchase and apply restricted-use pesticides must have a certified private pesticide applicators license issued by the Missouri Department of Agriculture. Successful completion of the MU Extension private applicator training is the requirement for receiving the license. During 2016, Richard Hoormann, St. Charles county-based specialist, trained 39 farmers, enabling them to continue to safely use crop protectants and comply with the Missouri State Law as outlined by the Federal EPA.

Agricultural production systems are dynamic and require constant attention to balance of food, feed and fiber production techniques.

Lab services provide safe recommendations

Commercial horticulture business and homeowners frequently have problems with poor plant growth. County soils vary greatly in the ability to support plant growth. Many growers understand that modification is necessary to successfully grow healthy plants but do not know the plant-food-supplying-power information needed. MU Extension, through its Soil and Plant Testing Lab, offers easy access for residents to obtain the base information necessary to achieve the desired plant response. Laboratory data from submitted soil samples gives specific recommendations for modifying the soil with fertilizers without endangering water quality. By providing researched-based recommendations, growers are able to avoid damage to aquatic systems that occur due to over application of fertilizers.

The Soil and Plant Testing Lab analyzes soil, plant, water, manure, compost and greenhouse media. Fee-based services are available to farmers, homeowners, consultants, horticulturists, researchers, golf course managers and government agencies. The lab provides quality testing and unbiased, research-based recommendations to clients for economically viable and environmentally safe nutrient management practices.

During 2016, 511 county residents brought samples to the extension center for recommendations. Included were 42 specialty tests not easily available anywhere else in the county.
**Hortline in demand**

The St. Charles County Master Gardener program provides year-round horticultural information to the gardening public through the volunteer **Hortline** service. During the growing season, April through September, volunteers can be found at the extension center during morning office hours nearly every day. During off-hours and the winter months, use of dedicated phone, voicemail and email allows volunteers to answer horticulture questions.

Master Gardener **Hortline** volunteers extend the research and knowledge of the University of Missouri research that is specific to the local climate, soils and plants. The majority of requests for information involve identification of plants, insects and causes of plant damage. Many plant retailers refer their customers to the **Hortline** to solve complex plant problems. Master Gardener training gives a good base for being able to diagnose plant health issues and to give the correct recommendations to manage plant health. Specific training to develop plant detective skills is part of becoming a **Hortline** volunteer.

The **Hortline** volunteers provided **480 hours** of in-person help at the extension center and handled **350 horticulture questions** in 2016. The Master Gardener **Hortline** volunteers can be reached for help year-round at 636-875-7457 or mgstcharles@gmail.com.

**Master Gardeners volunteer at the extension center during the growing season April – September.**

**Diagnostic clinic provides answers**

When the Master Gardeners at the Hortline and Rich Hoormann, Region Horticulture Specialist, cannot diagnose a plant health problem, they turn to the Plant Diagnostic Clinic. The clinic is capable of plant disease diagnosis (including turfgrass), identification of unknown plants and insects (including arachnids). Besides clinic staff, a diverse group of Plant Sciences faculty specializing in agronomy, entomology, horticulture or plant pathology assist with identification of pests as needed. The clinic is open year round. Samples can only be submitted by drop off at the extension center.
Making a difference through gardening

Master Gardener Program

The extension council’s horticulture education program for the county includes the St. Charles County Master Gardeners. The Master Gardener program is unique in the state with gardens on site at the extension center for demonstrations, research and teaching. The gardens are open to the public daily. During the spring and summer months, the gardens are visited by residents looking for ideas and getting answers to their gardening questions.

The Master Gardener program is self-sustaining with a single fundraiser activity. Combined with donations and grants, the over 100 active members maintain the 28 garden projects on site, provide information at county farmers’ markets, host learning events such as the Lawn Chair Tuesday Tours, speaking engagements and other community services. The gardens serve as an outdoor classroom for demonstrations of environmentally sound gardening practices.

Members are very active providing hands-on, research-based information to members and the plant enthusiasts in the county. The Master Gardeners volunteered 9,065 hours for projects such as growing vegetables for food pantry donations, answering requests for technical information, maintaining demonstration gardens, providing information at farmers markets in the county, garden tours, youth gardening training, speaking at community organizations about gardening and other unique events.

In 2016, the vegetable pantry demonstration garden’s weekly harvest provided a little over 1,000 pounds of fresh produce to the Sts. Joachim & Ann Care Service.

Master Gardeners also assisted garden projects with schools, churches and municipalities in St. Charles County.
Farmer education

In 2014 Rich Hoormann began a four-year pesticides and water quality education program targeting farm business operators in seven east-central Missouri counties. The program presented research-based information on crop production systems that reduce soil and pesticide runoff from farming operations. Participating farm business owners were surveyed following training to measure intended changes in their cropping systems to protect water quality. The survey results indicate a very high percentage of farmers are or intend to make changes as a result of MU Extension training.

Small Business Services in St. Charles County

- 33 new jobs
- $700,000 increase in sales
- $16,929,215 in government contracts
- 10 new businesses
- $347,500 in business loans and investments
- 170 clients/companies received business counseling
- 588 participants in business training and conferences
Offering information in a variety of ways

Building a strong community requires a broad range of expertise offered in numerous ways to give people the information they need when they need it.

**Radio call-in**
A partnership with local radio station KWRE 730 AM, enabled St. Charles County residents and those in seven other counties access to timely information from an extension specialist on a variety of topics.

*Live Wire* is a live, call-in program scheduled 9:00-9:30 a.m. the first Friday of each month. St. Charles County-based specialist, Richard Hoormann, participated in four live broadcasts covering timely agriculture and horticulture topics.

Partnering with KWRE promotes MU Extension’s outreach mission and the availability of research based information from county extension offices.

**Continuing education**
MU Extension Fire and Rescue Training Institute is the official training source for Missouri’s 25,000 career and volunteer firefighters. Courses prepare firefighters for medical emergencies, hazardous materials response and acts of terrorism, as well as fires. In 2016, 434 residents enrolled. [http://mufrti.org](http://mufrti.org)

The Missouri Training Institute provides training and consulting for public, private and not-for-profit organizations. In 2016, 78 residents participated in offerings. [http://mti.missouri.edu](http://mti.missouri.edu)

**At the office**
Faculty and staff handled 6,433 phone calls and 2,059 walk-ins to connect people with the information or expertise they needed.

2,669 individuals participated in meetings, programs or activities at the MU Extension facility.

**Internet**
Web access makes hundreds of fact sheets available on hundreds of topics of interest. [http://extension.missouri.edu/stcharles](http://extension.missouri.edu/stcharles)