

MTSU School of Agribusiness & Agriscience

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Stories and Pictures by ABAS Faculty, Staff and Students

ABAS Highlights for 2016-17 Academic Year

By Dr. Jessica Carter, Director
MTSU School of Agribusiness and Agriscience (ABAS)

Highlights:

- Enrollment for the Fall 2016 semester was 504 undergraduates and 11 graduate students in horse science. Undergraduate enrollment increased 12.5% from 2015 and is expected to remain above 500 students for the 2017-18 academic year.
- The faces in the School of Agribusiness & Agriscience have changed significantly during this past year as several long time faculty members have retired. New staff members have been hired for the Farm Laboratory and Horse Barn as well.
- Retirements have included Dr. Warren Anderson, Dr. Cliff Ricketts, Dr. Warren Gill, and Mrs. Anne Brzezicki. We wish them well in their retirement from MTSU.

- Classroom & building upgrades—SAG 125 is being renovated and will have a fresh look for the start of the fall semester. SAG 204 has also been renovated as a classroom for fermentation science courses.

- We are extremely pleased to have more endowed scholarships established this year. The first is from the John Campbell Family Endowment. The family of Dr. Harley W. Foutch established an endowed scholarship in his honor and memory. We were very pleased to be able to award this scholarship in Dr. Foutch’s honor. He served as the chair of the department for more than 20 years.

MTSU Creamery Debut Ceremony June 21, 2017

Story on page 2



MTSU President Sidney A. McPhee, left, School of Agribusiness and Agriscience Director Jessica Carter and Tom Womack, deputy commissioner for the Tennessee Department of Agriculture, enjoy the ceremonial first

To view video about the entire process, search for “MTSU Creamery” in YouTube or visit:

<https://www.youtube.com/watch?v=Z1lHoaonV2o&t=31s>



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Students help usher in MTSU Creamery's milk bottling process

Story contributions by Randy Weiler, MTSU news & public affairs.

Middle Tennessee State University students wanted to be a part of Wednesday's formal celebration rolling out bottles of whole white milk and one of MTSU's best-kept secrets — it's whole chocolate milk. Senior animal science major **Kayana Fonseca** and other students work seven days a week, 365 days a year, often arriving at 4 a.m. and again 12 hours later to ensure a quality product from the farm and dairy in Lascassas, Tennessee reaches the MTSU milk processing plant inside **Stark Agribusiness Center** on campus. With the installation of new equipment complete, MTSU's School of Agribusiness and Agriscience unveiled its latest endeavor — the **MTSU Creamery** — along with its new bottling process Wednesday (June 21) during a ceremony featuring milk and cookies in the Science Building's Liz and Creighton Rhea Atrium. It marks the first time in nearly 50 years MTSU will have bottled milk products. "The reputation of our award-winning chocolate milk, long a pride point of our university, precedes us at this event," said MTSU President **Sidney A. McPhee**. "You didn't need today's event to know this is simply the very best chocolate milk ever made. Period." McPhee said MTSU has become a national leader in helping students reach their goals through "exceptional teaching ... and life-changing opportunities in our classrooms, at our laboratories and through enterprises like the MTSU Creamery, which we celebrate today." **Tom Womack**, deputy commissioner for the **Tennessee Department of Agriculture**, said the MTSU dairy move further solidifies the university's footprint as a state and regional leader. "MTSU's dairy program also has been responsible for working with many dairy producers and processors in the region to advance the industry through education and economic opportunities," said Womack. "The addition of this new creamery will no doubt extend the program's reach and impact to the university and the greater community it serves," Womack added.

Speaking for her school in the **College of Basic and Applied Sciences**, Director **Jessica Carter** said the venture "marks the beginning of a new era with the re-branding of the MTSU Milk Plant as the MTSU Creamery." "We have aligned our school to become the leader in this state in not only providing our award-winning milk to our campus and community, but in providing workforce-ready graduates



MTSU student Jessica Schriver hands out pints of chocolate milk to people attending the June 21 Debut Ceremony for the Creamery in the Science Building. University officials announced the resumption of bottled milk to students, visitors and the public on and off campus. (MTSU photo by J. Intintoli)

for our industry partners," she added. "... We have positioned ourselves to provide an experiential learning component unequalled anywhere in this state." Featured in a new university video about the entire milk process — from the feeding and milking of cows, the processing plant procedures and delivery — junior **Jessica Schriver** has become the face of the School of Agribusiness and Agriscience's latest endeavor: a creamery.



L to R: MTSU Cow (Jacob Wade), Dr. Jessica Carter, Dr. Sidney McPhee, and Matthew Wade, Director of MTSU Farm Laboratories.

Students help usher in MTSU Creamery's milk bottling process, cont.

Major gifts from corporate sponsors **Farm Credit** (\$50,000) and **Tennessee Farmers Cooperative** and **CoBank** (\$20,000) made the purchase of the bottler possible. Alumnus **Matt Neal**, regional vice president for Farm Credit Mid-America, was instrumental in facilitating Farm Credit's gift. Alumnus **Fred Adams** and his family and **Tennessee Farm Bureau** provided additional corporate support. **Heritage Farms** has supported the milk plant as well by providing technical support to our plant operations. In addition to meeting MTSU's demands for bottled milk, **Matthew Wade, Experiential Learning and Research Center** director, envisions pint, half-gallon and gallon-size plastic bottles on the shelves in smaller local stores. Milk has been delivered in 5-gallon bags for campus dining dispensers, **Hattie Jane's Creamery** on the square in Murfreesboro for ice cream and **Two Fat Men Catering Company** in Lebanon, Tennessee, for light coffee cream and ice cream products. MTSU utilizes a 600-pound, two-valve filler, filling two bottles at the same time. Wade said students and staff can fill 10 gallons of milk a minute into the bottles.

Where can you purchase MTSU Milk?

On Campus:

- PODs in various locations across campus
- MTSU Bookstore
- MTSU Pharmacy located in the Rec Center
- Dwight's Mini Mart in the KUC
- All Cafeterias

Off Campus:

- Hattie Jane's Creamery
- Lascassas Feed Store
- City Cafe
- Rutherford Farmers Coop
- Woodbury Farmers Coop Convenience Store
- Two Fat Men Catering, Lebanon



MTSU Farm Laboratory Staff Update

Two new staff members have joined the Farm Laboratories since our previous newsletter, Jared Franklin and Steve Dixon.

Jared Franklin is serving as the Assistant Manager for the MTSU Dairy. He brings 20+ years of experience in dairy management with expertise in nutrition and reproductive technologies. Jared is the owner and operator of Dav-Lee



Dairy and he graduated from the University of Tennessee at Martin with a degree in Agribusiness. Jared has assisted with Dairy Production and Livestock Management courses and he is mentoring several MTSU students who are showing dairy cattle this summer. Jared is Active with Maryland and Virginia Milk Producers Cooperative and received the Outstanding Young Cooperator award. He serves on the Cannon County Farm Bureau Board of Directors, Dairy Promotion Board, American Dairy Association Director and is a volunteer for Cannon County 4-H programs.

Steve Dixon is serving as the manager of the MTSU Creamery. He is our most recent hire for the Farm Laboratories and hit the ground running after the debut ceremony for rebranding of our milk plant. Steve has worked in the



dairy processing industry since 1995, most recently with Dean Foods. Steve is active in the local community, and has established relationships with Purity Dairies, Country Delights Farms, Heritage Farms (Kroger), along with supply and repair companies such as, M. G. Newell, Statco, Inc.

Faculty News & Updates

Dr. Holly Spooner earned a major national recognition — the 2017 Equine Science Society Symposium Josie Coverdale Award for Outstanding Young Professionals. The award is presented to an equine professional under the age of 40 that has made meritorious contributions to equine science in teaching, research, public service or industry.



During the Intercollegiate Horse Shows Association nationals May 4-7 at Kentucky Horse Park in Lexington, Kentucky, the **Coach Sportsmanship Award** was presented to MTSU's Anne Brzezicki, who is retiring after 32 years. In 2015, she received the **Certified Horsemanship Association Instructor of the Year Award** in Amarillo, Texas.



You're invited to celebrate the career and contributions of

Anne Brzezicki

as she retires as MTSU's director of equestrian programs.

Dinner—Friday, September 22, 6:30 p.m.

Tennessee Room, James Union Building

MTSU Campus

\$35 per person

Horse Science Center Open House

Saturday, September 23

1:00–4:00 p.m.

314 West Thompson Lane, Murfreesboro

RSVP by September 15 online at mtalumni.com/brzezickicelebration or by calling 800-533-6878

Dr. Foutch Obituary

Dr. Harley Wayne Foutch, age 72, of Murfreesboro, TN, passed away May 9, 2017. Dr. Foutch was born in Woodlawn, IL in 1944. He was the son of the late Cleo and Marie Dobbs Foutch. He married Linda Rowland on July 25, 1970 in Christopher, IL. He is survived by his loving wife Linda of 46 years; daughters, Michelle



Rowe and her husband Scott of Signal Mountain, TN and Robin Anderson and her husband Ryan of Milton, TN; six grandchildren, Caleb, Emalee Grace, and Joshua Rowe and Ashlyn Harley, Katie Ryan and Brady Wilson Anderson; and three sisters, Mary Alice Fox of West Frankfort, IL, Shirley Corder and her husband Briggs of Jacksonville, NC, and Fern Eubank of Smyrna, TN; and a brother, Tony Foutch and his wife Peggy of Woodlawn, IL, along with many nieces and nephews.

Dr. Foutch began his teaching career at Middle Tennessee State University in 1970. He was named Chairman of the Department of Agriculture in 1980 and retired as Director of the School of Agribusiness and Agriscience in 2008. He received his B.S. and M.S. degrees from Southern Illinois University and his Ph.D. in Agronomy from Auburn University.

Dr. Foutch was a two time recipient of the MTSU Outstanding Teacher Award. He received the Distinguished Educator Award from the North American Colleges and Teachers of Agriculture (NACTA). He was named President of the American Association of State Colleges of Agriculture and Renewable Resources (AASCARR) and President of NACTA.

Dr. Foutch was a member of North Boulevard Church of Christ. He loved the outdoors and always had a beautiful "weed free" garden. He was a kind hearted, fun loving man who loved time spent with family. Very respected for his scholarly and career achievements, he will always be remembered by family and friends for his humor and contagious laugh.

Memorials may be made in honor of Dr. Foutch to the Dr. Harley W. Foutch Endowed Scholarship Fund at Middle Tennessee State University Foundation, P.O. Box 109 Murfreesboro, TN 37132.

New ABAS Faculty

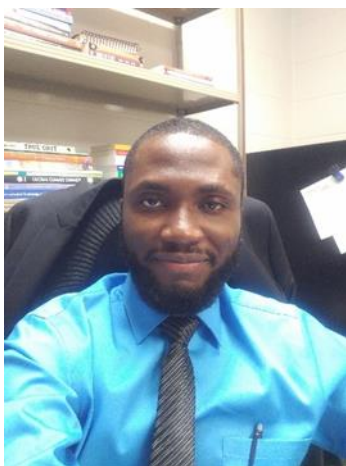
Dr. Ying “Iris” Gao

Dr. Ying Gao received her Ph.D. in Plant Molecular Biology from Peking University in 2004. She joined MTSU as a Research Assistant Professor in 2011 and joins the School of ABAS for the Fall 2017 semester as an associate professor of plant science. Prior to joining MTSU, Dr. Gao had been a Research Scientist at Beijing Genomics Institute. Dr. Gao’s research focuses on various biological and pharmaceutical activities of medicinal plants, such as anti-cancer, antioxidant, cardiovascular protective, neuroprotective, anti-inflammatory, and anti-malaria activities, for the development of new therapeutic agents. Moreover, she is also interested in the conservation and sustainable use of medicinal plants. She has published more than twenty peer-reviewed research articles in *Plant Cell*, *Plant Physiology*, *Plant Molecular Biology*, and others. She has filed three international patents of potential therapeutic agents.



Samuel I. Haruna, Ph.D.

Samuel earned his doctoral degree in Soils, Environmental and Atmospheric Sciences at University of Missouri, Columbia. Samuel is passionate about teaching; encouraging curiosity and training the next generation of scientist, and research. His research interests revolve around evaluating the influence of various crop and soil management practices on soil hydraulic properties, soil thermal properties, and the spatial distribution of soil physico-chemical properties. His



research has demonstrated the influence of a combination of various management practices on soil physical and hydraulic properties, and on water infiltration parameters. He is also very passionate about soil health, soil conservation and sustainable soil management practices for increased crop productivity. When he is not teaching or conducting research, he loves to hike (he can be seen taking walks around MTSU campus and various hiking trails around Murfreesboro), and watching documentaries on flight physics, astronomy and astrophysics. He also enjoys cooking (he is a self-proclaimed ‘master of the culinary arts’) and dancing (usually offbeat).

Dr. Seockmo Ku

Dr. Seockmo Ku is an Assistant Professor of Fermentation Science in the School of Agribusiness and Agriscience at Middle Tennessee State University. Dr. Ku is a professional fermentation scientist, food microbiologist, and certified nutritionist. He is also a co-inventor of 2 patents, and has an additional patent pending. He has conducted several research projects in academia and industry. He believes that his diverse research experiences can be an asset to seek grants and lead future research projects at MTSU. At Seoul National University, he conducted experiments to develop functional foods using lactic acid bacteria. During his PhD studies at Purdue University, he has developed novel technologies that enable the rapid detection of food-borne pathogenic bacteria with specific emphasis on the microfiltration of food samples to accelerate *Salmonella* detection. In addition to research experiences in academia, Dr. Ku has professional experiences in launching several new products at CJ Cheiljedang Food R&D Center, formerly a parent company of Samsung and currently one of the largest food and biotechnology conglomerates in Asia.



New ABAS Faculty, cont.

Mrs. Andrea Rego

Mrs. Andrea Rego grew up active in Georgia 4-H and showing horses in all-around events as a youth. She received a B.S. in Animal Science from Berry College, where she competed nationally on their varsity equestrian team. Andrea received her M.S.



in Horse Science from MTSU and then joined the faculty at Horse Science in August of 2016. As a lecturer Andrea teaches a variety of undergraduate courses in horsemanship, equine assisted activities and therapies, stable management, event management, and introduction to animal science. Additionally, Andrea coordinates the Center of Equine Recovery for Veterans (CERV), a program established as a partnership with the Veterans Recovery Center in Murfreesboro, TN and MTSU Horse Science to provide services for Veterans diagnosed with a mental illness. Andrea also assists in coaching the nationally renowned equestrian team and stock horse team.

Ms. Ariel Herrin

Ms. Ariel Herrin is a recent graduate of MTSU, earning a Master of Science degree in horse science with an emphasis in equine education. She also completed a B.S. degree from MTSU in animal science with a horse science concentration. Ariel has shown American Quarter



Horses since her early childhood years and she is an AQHA World and Reserve World Champion. Ms. Herrin competed on MTSU's equestrian team and served as the president. She earned reserve national cham-

ion honors and represented MTSU at the national championships as the high point rider. Ms. Herrin has served as an assistant coach to the MTSU Equestrian team for the past two years. She is excited to begin her new role as the Director of Equestrian Programs at the school where she learned so much and knows so well!

Dr. Susan Speight—Animal Science

Dr. Susan Speight is a Lecturer of Animal Science in the School of Agribusiness and Agriscience at Middle Tennessee State University. She received her B.S. in Animal and Avian Sciences from the University of Maryland College Park, and her M.S. in ruminant nutrition from the University of Kentucky. Her Ph.D. work in swine physiology at Virginia Tech focused on the impact of form of selenium supplementation on growth, carcass characteristics, testis gene expression, stored semen quality, and semen in vitro fertilization capacity of A.I. boars. Susan's research interests include the interaction between animal nutrition and reproduction in order to maximize animal production. Dr. Speight is a passionate teacher that is committed to giving MTSU students as much hands-on experiential learning opportunities as possible in her animal science courses. When she is not teaching, she can usually be found training or competing her two Australian Shepherds, Juju and Zing, in conformation, obedience, agility, or nose work.

MTSU Horticulture Students Successful at the Southern Region – American Society for Horticultural Science meeting (ASHS).

Five students traveled to Mobile Alabama to compete in the horticultural commodities judging contest and present undergraduate research. The horticultural commodities contest consists of the judging of floriculture, nursery, vegetable, and fruit crops. Additionally, students compete in the floriculture and nursery plant identification contest. The horticulture team's preparation payed off. They took 3rd place overall, and had multiple division placings. The team consisted of **Zach Stevens, Crystal Richeson, Christina Aube, and Hunter Holden.**



Pictured from left to right: Crystal Richeson, Hunter Holden, Andrew Thomas, Zach Stevens, Christina Aube, and Nate Phillips.

Zach Stevens was also awarded an individual 3rd place in the Nursery Plant Division. The students were able to enjoy activities with students from other schools belonging to the Associated Collegiate Branch (ACB) of the ASHS. MTSU

Faculty Research — Dr. Song Cui

Dr. Song Cui, an Assistant Professor in Agronomy has been involved in various aspects of agronomic research related to crop ecophysiology, forage production, agroecology, precision agriculture, simulation modeling, remote sensing using UAV, and bioinformatics. Dr. Cui is currently directing several USDA funded research projects (totaling \$1.7 Million) in collaboration with Texas A&M University at College Station, Sam Houston State University, University of Tennessee at Knoxville, and University of Tennessee at Martin.



Dr. Song Cui is demonstrating the use of Unmanned Arial Vehicles in Agriculture and other agronomy projects that he currently has underway.

2016-17 ABAS Scholarship Award Recipients

Adams Family Allison Parker
 Adams FamilyChristina Davis
 Adams Family Alyssa Summar
 Adams FamilyRachel Elrod
 Adams Family Caitlin Faulk
 Adams FamilyKylan Layne
 Adams Family Jordin Hockaday
 Adams FamilyJordan Greeson
 Adams Family Jessica Steen
 Adams FamilyLauren Rieuf
 Agriculture Endowment.....Leah Steele
 Agriculture Endowment.....Savannah Montgomery
 Agriculture Endowment.....Stephen Lamb
 Boxwood Farms.....Joshua Howland
 Campbell Family Endowment.....Austin Tipton
 Catherine Ellington.....Allison Dennis
 Dairy Science Club.....Ryan Pankey
 Dr. Harley W. Foutch Endowment.....Sarah Keefe
 Dr. Robert Garrigus Endowment.....Madeline McDonald
 Dr. Robert Garrigus Endowment.....Jessica Schriver
 Fowler and Ruth Nickle.....Faith Hoffmire
 Hayden Memorial.....Ella Jo Hudson
 Heritage Farm.....Taylor Schiefer
 Hugh Burrum.....McKenzie Hassler
 Hugh Burrum.....Kaylee Hayes
 Paul Cantrell Agribusiness.....Justin Young
 Robert Alexander.....Austin Brennstuhl
 Robert Jarrell Memorial.....Nolan Jolley
 TN Council of CoopsValerie Preston
 TN Farmers Coop.....Jessica Cripps
 TN Farmers Coop.....Jessica Hickson
 TN Farmers Coop.....Abagayle Morton
 TN Farmers Coop.....Andrew Pryor
 Theodore Bigger.....Benjamin Fox
 Thomas F. Rowlett Jr. Memorial.....Austin Brennstuhl
 Towry Endowment.....Jared Vance

Incoming Freshman Scholarship Awards:

TN Farmers Coop.....Jessica Hickerson
 Adams Family.....Lindsey Parsley
 Adams Family.....Sarah Kozuszek
 Joe Jack & Jerry Dement Scholarship....Sammy Mould
 TN Rehabilitation Corporation.....Gordon Moncier
 TN Rehabilitation Corporation.....Abby Taylor
 TN Rehabilitation Corporation.....Shelby Oldham
 TN Rehabilitation Corporation.....Whitley Allen

Scholarships awarded at the Horse Science Banquet:

J.W. Cross Scholarship.....Jessica Schriver
 Kitty Adams Scholarship.....Patricia Wingate
 Mark Moskovitz.....Madison Armstrong
 Tennessee Horse Council.....Lauren Rieuf
 Joan Hunt Scholarship.....Mary C. Wade

Senior Honor Students:

Megan Chong	Shannon McCarter
Kady Lovelady	Rebecca Miller
Delaney Rostad	Todd Pirtle
Hayden Snow	Connor Slane
Michael Brindle	Kimberlee Wilson

We awarded 53 scholarships totaling more than \$50,000.

Outstanding Senior Awards

Robert A. Alexander Outstanding Agribusiness Senior Award

Adam Martin

Outstanding Animal Science Senior Award

Megan Chong

Sam Paschal Award for

Outstanding Horse Science Senior

Hayden Snow

Theodore C. Bigger Outstanding Plant and Soil Science Senior Award

Andrew Thomas

B.B. Gracy, Jr. Outstanding Agriculture Senior Award

Todd Pirtle

ABAS Scholarship Applications Online

Scholarships in the School of Agribusiness & Agriscience are available to students majoring in some phase of Agriculture. Scholarships are awarded on the basis of specific requirements of the donor, academic performance (grade point average), financial need, and student involvement in extracurricular activities. Applications are **DUE BY March 1** annually.

Go to www.mtsu.edu/abas

Ag Education Spring Fling

On April 11, 2017 the MTSU Agritourism Class members in conjunction with the MTSU Agritourism Club members hosted the 4th annual Agricultural Education Spring Fling. This event is designed to introduce and educate children grades Pre-K through 2nd grade about agriculture. The attendees were exposed to everything from tractors and typical farm animals to bees and a soil tunnel. The event hosted approximately 800 Pre-K through 2nd graders from ten different elementary schools throughout Rutherford County. The event was planned and facilitated by over 100 MTSU Agriculture students, with over 1000 people total in attendance. The Agricultural Education Spring Fling was made possible by a university public service grant, as well as the students' willingness to educate our future Blue Raiders. In the photo below, **Dr. Alanna Vaught** and **Stephen Lamb** speak to a group of school children.



MTSU Agribusiness major and State FFA Sentinel Allison Parker spoke to the State House Agriculture Committee during Ag Day on the Hill.

More photos from the Creamery Debut



MTSU Dairy Science Club students exhibited Holstein heifers at the Williamson County Fair. From L to R: Wade Dunaway, Kayana Fonseca, Jessica Schriver, and Austin Brennstuhl.

Block & Bridle Club



The Animal Science Academic Quadrathlon team competed at the Southern Section, American Society of Animal Science contest on Feb. 4-5, 2017. Ten teams represented the some of the best animal

science programs in the southern region. The contest was hosted by the University of Tennessee and the lab practicum was held at the Middle Tennessee Research & Education Center in Spring Hill, TN. MTSU students represented on the team were Christina Davis, Jordan Greeson, Julia Rhyne, and Hayden Snow. The students were coached by Dr. Jessica Carter and Erica Macon, Horse Science graduate student. The MTSU team placed 1st in the written exam and 3rd in the laboratory practicum. Other events included the quiz bowl and oral presentation. Congratulations to the team for representing us well!



Students trimmed sheep hooves during the lab practicum that was held at the University of Tennessee Agricultural Experiment Station.

National Block & Bridle Convention

Eight MTSU Block & Bridle students and their advisor, Dr. Jessica Carter attended the National Block & Bridle Convention that as held in Washington DC in April. Students participated in agriculture industry tours, leadership workshops, and toured several monuments and our nation's Capital building.



L to R: Jordan Greeson, Christina Davis, Hayden Snow, and Julia Rhyne.



L to R: Dr. Jessica Carter, Morgan Jernigan, Madison Armstrong, Christina, Davis, Jessica Schriver, Leah Steele, Rylie Topping, Amelia Higgins, and Jordan Greeson.

Foundation donates \$10K to MTSU's 'CERV' program for veterans

Story contributions by Randy Weiler, MTSU news & public affairs.

A \$10,000 donation from Grammy Award-nominated Mississippi rock back **3 Doors Down's** foundation will benefit **MTSU** students and faculty working in equine therapy with veterans from the Murfreesboro-based Veterans Recovery Center. Along with his wife, **Jen Arnold**, an award-winning barrel race competitor herself, 3 Doors Down singer **Brad Arnold** and the band's **Better Life Foundation** made the gift Tuesday (June 13) at the university's **Horse Science Center** facilities on West Thompson Lane. Brad Arnold presented the check for the **Center of Equine Recovery for Veterans**, or CERV program, to MTSU's **Andrea Rego** and **Rhonda Hoffman**, director of the horse science program. Rego oversees CERV, coordinating student involvement that has reached a ninth regular session and second advanced session working with veterans.



Jen Arnold, left, and MTSU student Caroline Blackstone admire Jay R, one of the MTSU horses used in the CERV equine therapy program to assist veterans. Arnold's husband, Brad Arnold, lead singer for the rock band 3 Doors Down, and the Better Life Foundation presented a \$10,000 check for the Center of Equine Recovery for Veterans June 13 at the Horse Science Center. MTSU photo by Randy Weiler)



MTSU horse science director Rhonda Hoffman, left, accepts a \$10,000 check for the Center of Equine Recovery for Veterans June 13 from 3 Doors Down lead singer Brad Arnold and the group's Better Life Foundation. Viewing the presentation are MTSU sophomore Caroline Blackstone (next to therapy horse Jay R) of Atlanta, Ga., program director Andrea Rego and band

The money is earmarked for horse care and equipment needed for the program, which began in 2013. "We are extremely grateful for the donation," Rego said. Brad Arnold said he is keenly aware "the value horses have added to my life, and I think there's a lot to be learned from equine therapy and proud to be a

part of this program to share that therapy with other people." The Center of Equine Recovery for Veterans, or CERV program, is a partnership between the Veterans Recovery Center, a psychosocial rehabilitation center, and MTSU Horse Science. CERV offers VRC veterans an opportunity to ride and benefit from interacting with horses while MTSU students gain valuable experience in helping facilitate the sessions.

The Better Life Foundation is a charity organization established by 3 Doors Down in 2004. It has raised and distributed more than \$3 million to reputable children's charities, local municipalities and faith-based groups to achieve its goals of helping local communities. More information is available at <https://www.thebetterlifefoundation.org>.

MTSU recording industry alumnus **Chet Roberts** (Class of 2004) attended along with band manager **JP Durant**. **Brian McSpadden**, recreation therapist with the Tennessee Valley Healthcare System's Alvin C. York campus, shared with those attending the many benefits of equine therapy.

Fermentation Science—New Major Fall 2017

Story contributions by Randy Weiler, MTSU news & public affairs.

With its first classes just approved and students already lining up, MTSU celebrated the announcement of its new **fermentation science** bachelor's degree program with industry partners and state officials on Feb. 27, 2017 in the Science Building. University President **Sidney A. McPhee** recognized those who championed the program, which begins this fall, including state Sen. **Bill Ketron**, professor **Tony Johnston**, College of Basic and Applied Sciences Dean **Bud Fischer**, former Provost **Brad Bartel** and other campus leaders. McPhee also praised industry, in particular the Murfreesboro **General Mills** plant and **Steel Barrel Brewing Co.**, in pledging support for the program and the potential for students to become workforce ready.

Fermentation is a process converting sugars to acids, gases or alcohol. Yeasts, molds, and bacteria are responsible for fermentation, resulting in familiar foods such as beer, wine, liquor, dairy products including cheese and yogurt, and other many other foods and beverages. Ketron said because of the rigorous course demands and various collaborations, the degree “will provide real-world classroom for practical experience” for students and “an opportunity for MTSU to do something unique as we recognize the demands of this industry and its economic implications for both our students and our communities.”

Along with General Mills' processing of **yogurt**, the rapid growth of the **craft beer industry** locally and nationwide led Fischer to drive his faculty for a solution. Johnston, already an expert in the wine industry, answered the call.

“Fermentation is one of the oldest forms of food preservation known to mankind,” said Johnston. “As our world population approaches 11 billion by the year 2100, fermentation will be absolutely essential to ensure that we can feed ourselves. ... The program is designed to instruct students in the science of fermentation as well as the need to understand the business of commercializing fermentation.” MTSU alumnus **David Tinch**, head of the General Mills plant, was unable to attend, but said in a statement that his company “is proud to be a member of the Murfreesboro and greater Tennessee communities.” “We believe we have the best employees and with degree opportunities like what MTSU has created, I believe our talent will only continue to get better and grow,” he added. An invited guest was **Derrick Morse**, co-founder and brewmaster of Steel Barrel Brewing Co., which plans to open soon on an 82-acre site not far from the MTSU campus. MTSU alumnus **Mark Jones** is co-founder of the company. Twenty acres will be used for agricultural purposes, giving MTSU students additional opportunities. “Steel Barrel will offer space for a working laboratory in this craft brewery, which will allow Dr. Johnston's students to get practical, firsthand experience in this field,” McPhee said. There are approximately 30 distilleries, 52 breweries, 60 wineries and 60 cheese-making operations in Tennessee.



MTSU President Sidney A. McPhee, right, visits with alumnus and Steel Barrel Brewery co-founder Mark Jones, center, and Maneet Chauhan, a founding partner in Life Is Brewing LLC and a chef and featured judge on the Food Network's "Chopped" series June 15 at Hop Springs, the company's new location for a brewing facility on the John Bragg Highway.

Farm 2 School: 1,300 City Schools' third-graders experience MTSU farm life

Story contributions by Randy Weiler, MTSU news & public affairs.

Mitchell-Neilson Elementary School third-grader **Taylor Vandenburg** did what many of her peers chose not to do: She scooped up some silage used to feed **MTSU** dairy cows, just to obtain a whiff of it.

Other students petted cows and calves, drank chocolate milk from the cows, made a craft out of dried beans and yarn and learned about tractors, honey from bees and other aspects of the working farm in Lascassas, Tennessee. To view video from the event, visit <https://youtu.be/vLom-CkECsw>.

About 1,300 **Murfreesboro City Schools'** third-graders visited the university's **Experiential Learning and Research Center** — the farm and dairy — Wednesday (May 17) as part of the third **"Farm2School"** field trip in as many years. The farm experience is part of a partnership between Murfreesboro City Schools and MTSU. In addition to Mitchell-Neilson, other schools participating on the warm and breezy day included **Black Fox, Bradley Academy, Cason Lane Academy, Discovery School, Erma Siegel, Hobgood, John Pittard, Northfield, Overall Creek, Reeves-Rogers and Scales.**

Mitchell-Neilson's **Jasmine Dykes**, 9, enjoyed "making butter and petting the cows." After drinking chocolate milk, she said, "it was good." The best part of making butter for her was that "I got to shake it."

A number of MTSU and City Schools' staff coordinated the four-hour event. Various MTSU students and staff shared about the dairy, garden and life on a farm. Stations the children visited included tractor safety, educational craft, garden area pig display, honey bees, making butter and chocolate milk.



Jared Franklin with the MTSU dairy farm talks about the cows they have on the farm as a group of Discovery School third graders observe the cows during their tour, on Wednesday, May 17, 2017.



MTSU senior agribusiness major Stephen Lamb talks about the tiller and power takeoff, or PTO, drive shaft on a tractor to third-graders during Murfreesboro City Schools' "Farm2School" visit May 17 at the MTSU Farm and Dairy in Lascassas, Tenn. (MTSU photo by Randy Weiler)

MTSU stock horse team lassos second place in national event, by Randy Weiler

Middle Tennessee State University was named **reserve national champion** — a second-place showing — at the American Stock Horse Association collegiate championship show in Sweetwater, Texas, earlier this spring. This comes following MTSU winning the Division II national championship in 2016.

The National Collegiate Championship brings together collegiate and individual riders from across the country to present their versatile stock horse. A stock horse is well suited for working with livestock, particularly cattle.

Two students, recent May graduate **Delaney Rostad** of **Maryville, Tennessee**, and junior **Luke Brock**, a transfer from **Franklin, Tennessee**, finished in the top-10 in the nation in their respective nonpro and novice divisions, respectively. “I felt good about how they performed,” said coach **Holly Spooner**, associate professor in the horse science program, discussing the overall team effort. The team competes in working cow horse, reining, ranch pleasure and ranch trail, Spooner said.

In addition to Rostad and Brock, other team members included **Rachel Hutton**, a graduate student from **Knoxville, Tennessee**; **Seneca Sugg**, a grad student from **Memphis, Tennessee**; sophomore **Jessica Starling** of **Cleveland, Tennessee**; and senior **Trevor Higgins** of **McMinnville, Tennessee**.



MTSU rider **Kelsey Sloan** exhibits her form and communication skills during the canter in the Cacchione Cup flat phase at the IHSA national in Lexington, Ky. (Submitted photo by Robin Duff)

Lexington, Kentucky. The IHSA nationals were a culmination of regional competitions for 400 college and university programs and 9,100-plus riders.

Kelsey Sloan placed third overall in the Cacchione Cup in the Hunter Seat division. She was in fifth place out of 38 riders in the first phase where the course included 10 fences the horse and rider must clear, second in Phase 2 (on the flat) and third overall after the top five performed an additional test over a course of fences. Sloan is a junior horse science major from Olive Branch, Mississippi. **Lauren King**, a senior business management major from Arrington, Tennessee, placed third in the individual reining competition sponsored by the National Reining Horse Association. **Lindsey Ross** rode to a third-place finish in Novice Over Fences. The junior criminal justice major from Maryville, Tennessee, was reserve zone champion before the nationals. **Delaney Rostad** finished fifth in NRHA Individual Reining and 16th in the American Quarter Horse Association High Point Rider class. Rostad is a senior horse science major from Maryville. She earned high point Western rider honors for Zone 5/Region 1.

Morgan Bowie, a junior horse science major from Toney, Alabama, competed but did not place in Advanced Western Horsemanship. She was reserve champion at the Western semi-finals earlier this spring.

Seven equestrian team members were recognized with All-Academic Achievement Awards. Ross, King, Rostad and **Caroline Blackstone**, a freshman from Murfreesboro, received first-team honors for having GPAs of 3.8 or higher. Second-team honorees (for having a 3.5 to 3.79 GPA) included sophomore **Holly Poindexter** of Clarksville, Tennessee, junior **Julia Rhyne** of Brentwood, Tennessee, and junior **Lauren Rieuf** of Franklin, Tennessee. Instructor **Andrea Rego** and graduate students **Emily Cavender** and **Ariel Herrin** assisted Brzezicki with all the teaching and various other details in the program.



MTSU rider **Delaney Rostad** earned a top-10 showing at the National Collegiate Championships for stock horses in Sweetwater, Texas, where MTSU placed second in its division. She also competed and placed in the Intercollegiate Horse Show Association event at Lexington, Ky. (Submitted photo by Mark King)

MTSU riders' national, academic awards end coach's career on a high note

It turned into an award-winning competition for **Middle Tennessee State University** equestrian team members and longtime coach **Anne Brzezicki** during the Intercollegiate Horse Shows Association nationals May 4-7 at Kentucky Horse Park in



**A SimAngus cow/calf pair at the MTSU Beef Unit.
Photo credit: Jessica Carter**

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