



News from KSU Animal Sciences

May, 2017

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UPCOMING EVENTS...

☛ **“Top Hand” Cattle Feeding Industry Employee Awards to be given at K-State Cattle Feeders College on May 25.** The 2017 K-State Cattle Feeders College will be held on May 25 at the William Carpenter 4-H Building, 608 Fairground Road, Scott City, KS. Top Hands will be recognized in the cattle division. A representative of the nominating feedyard and the award recipient must be present to accept awards. Nominations are due by May 19, 2017, to Justin Waggoner at jwaggon@ksu.edu.

Registration for the K-State Cattle Feeders College will begin at 4:00 pm. This edition of the K-State Cattle Feeders College will offer in depth sessions on cattle health, horse nutrition, bits and horsemanship. Featured speakers include Dr. A.J. Tarpoff, Extension Beef Veterinarian, Kansas State University; Dr. Jason Turner, Extension Horse Specialist, New Mexico State University; Gary Wiggins, Wiggins Bits and Spurs, Brewster, KS; and Todd Adams, Hitch Ranch, Guymon, OK. There is no cost to attend, but registration is required by May 19. Dinner will be provided. To register, contact Justin Waggoner (620-275-9164; jwaggon@ksu.edu) or John Beckman (620-872-2930; jbeckman@ksu.edu). For more information, go to www.southwest.ksu.edu.

☛ **Developing and Implementing a HACCP Plan for Meat and Poultry Workshop will be held June 6-8, 2017,** in Weber Hall, Kansas State University, Manhattan, KS. This three-day workshop uses curriculum recognized by the International HACCP Alliance for meat and poultry processors and is led by an International HACCP Alliance Lead Instructor. The workshop fee is \$450 per person, and participants will be presented with a certificate with an International HACCP Alliance seal upon completion of the course. Registration is limited to 25 participants. For more information, contact Dr. Liz Boyle (lboyle@ksu.edu; 785-532-1247). Registration is online at <http://haccp.unl.edu>.

☛ The **KSU Youth Horse Judging Camp – Beginners Section** will be held June 6, 2017, and the **KSU Youth Horse Judging Camp – Advanced Section** will be held June 7-8, 2017. For more information, camp agenda and registration forms, visit the website www.asi.k-state.edu/research-and-extension/youth-programs/judging-camps.html. You can also contact James Lattimer, (785-532-2840; jlattimer@ksu.edu) or Katie Jordan at (katiejordan@ksu.edu).

☛ **2017 K-State Livestock Judging Camps** – The camp is a three-day, intense judging camp designed for 4-H and FFA members ages 14-18 who are seriously interested in enhancing their livestock judging and oral communication skills. Prior livestock judging experience is necessary for this camp. The camp will focus primarily on the proper format, terminology and presentation of oral reasons. The 2017 camps will be held: June 7-9 (Wednesday-Friday); June 12-14 (Monday-Wednesday); or June 16-18 (Friday-Sunday). For a complete schedule and registration information, visit www.asi.k-state.edu/research-and-extension/youth-programs/judging-camps.html. The registration deadline is May 22. For more information, contact Chris Mullinix (785-532-1917; cmullinix@k-state.edu).



↳ **K-State Animal Sciences Leadership Academy** - Kansas State University will host the K-State Animal Sciences Leadership Academy June 14-17, 2017, for young livestock industry leaders. This four-day event will focus on increasing young leaders' knowledge of Kansas' diverse livestock industry as well as building participant's leadership skills. Students will stay in university housing with event staff for the duration of the event. Twenty high school students (current 9th-12th graders) have been selected to participate. For more information, please contact academy director, Sharon Breiner at sbreiner@ksu.edu.

↳ **State Livestock Nominations – Due June 15th** - All small animal state livestock nominations (non-market beef) are due June 15th. This includes commercial heifers, market swine, commercial gilts, market lambs, commercial ewes, and ALL meat goats. There is not a separate division for registered breeding does at either state show, so all meat goats must be nominated in order to be eligible to show. The 2017 nomination information has been distributed to county offices and may be found on the Youth Livestock Program website (www.youthlivestock.ksu.edu). The 2017 Declaration and Specie Nomination Forms MUST be used for nominations to be accepted. All families are encouraged to use the specie checklist as a guide to ensure their nominations are complete upon submission. This resource may be found on the Youth Livestock Program website, or through the local county office. Please double check that there are not any blank fields or questions on the Declaration and Nomination Forms before placing them in the mail. As a reminder, ear notches are required for swine nominations and scrapie tag numbers are required for sheep and goats. This year, the full scrapie tag number is required, which includes the flock/premise ID and individual animal number. Nominations received without this information will be considered incomplete and returned to the family for completion. Confirmation letters will be sent to families once their nominations have been processed, and reports will regularly be posted on the Youth Livestock Program website. Families are encouraged to use one of these options to verify their nominations. A complete nomination does NOT constitute show entry. The Kansas State Fair and KJLS will release entry information to agents and through their respective websites as entry season draws near. State Fair Grand Drive entries will be due July 15th, and KJLS entries will be due August 15th. Animals who are nominated, but do not follow the appropriate entry processes set forth by each show, will not be permitted to show. For nomination questions, please contact Lexie Hayes at adhayes@ksu.edu.

↳ **Youth PQA+ Certification** - All exhibitors who state nominate swine projects MUST have a Youth PQA+ certification number at the time of nomination, or by June 15th. There is a field for this information on the swine nomination form, under the contact information. Any nominations received without the appropriate Youth PQA+ number will be considered incomplete. Kansas youth may obtain their certification by participating in a class provided by an extension agent who is currently certified to teach Youth PQA+, or by completing the Pork Board's online Youth PQA+ training. If you are an agent interested in becoming certified to teach Youth PQA+, please contact Lexie Hayes at adhayes@ksu.edu. The youth and adult PQA certifications are separate processes. So, if you are certified to teach the adult portion, you may not certify youth without going through the appropriate training. If you have questions about youth who are too young to receive a certification number (less than 8 years old), please contact Lexie Hayes at adhayes@ksu.edu.

↳ The **2017 Dr. Bob Hines Kansas Swine Classic** is scheduled for July 7-8, 2017, at CiCo Park in Manhattan. This two-day event includes educational workshops, showmanship contest, and a prospect and market hog show. It is open to all Kansas youths ages 7 through 18 as of January 1, 2017. Again, this year all market pigs will be shown together and divided into classes based on weight.

This year's Classic will feature a swine photography contest along with a swine skillathon. For the Swine Photography Contest, youth may submit up to two swine photos. Photos should be 8x10 size and should not be framed or matted. Photos will be placed in plastic sleeves and displayed throughout the weekend. Outlined below is a schedule of this year's program.

Friday, July 7

8:00 a.m.	Barn open for arrival
12:00 p.m.	All hogs in place
1:00 p.m.	Swine photo check-in by the showing
1:00 – 3:00 p.m.	Swine Skillathon in the showing
4:00 p.m.	Ice cream party by the showing
5:30 p.m.	Showmanship contests

Saturday, July 8

8:00 a.m. Prospect Hog Show followed by Barrow and Gilt Market Hog Show

Entries must be postmarked by June 25, 2017. More information and registration is available at www.KSUswine.org. For more information, contact Joel DeRouchey (785-532-2280; jderouch@ksu.edu) or Lexie Hayes (785-532-1264; adhayes@ksu.edu).

↪ **KASLA Premier Program** - We are excited to offer K-State Animal Science Leadership Academy Alumni a new program to continue their education and personal growth this summer. We will be hosting the first KASLA Premier Program that will offer past participants an additional opportunity for exclusive tours and leadership content.

The first K-State Animal Sciences Leadership Academy Premier Program is scheduled for July 12-14, 2017. Students who have successfully completed the KASLA program and who are 20 years old and younger at the time of the event, are encouraged to apply. This exciting new program will allow students the opportunity to continue building their personal leadership development and expand their industry knowledge.

Applications must be postmarked by May 15. Please contact Sharon Breiner, program director, at sbreiner@ksu.edu with questions.

↪ **Kansas 4-H Livestock Sweepstakes August 19-20!** - The 2017 Kansas 4-H Livestock Sweepstakes will be held August 19-20 on the K-State campus in Manhattan, KS. Mark your calendars! This is the corresponding date to previous years. The 4-H Livestock Sweepstakes event includes the state 4-H livestock judging contest, meat judging contest, livestock skillathon, and livestock quiz bowl. The members who will represent Kansas at the national 4-H contest for each of these events will be selected during the livestock sweepstakes weekend. The deadline to enter will be August 1. All entries must be made by the local Extension Office using Cvent. Additional details will be released in June. For more information, contact Lexie Hayes at adhayes@ksu.edu.

↪ The 2017 **Applied Reproductive Strategies in Beef Cattle Conference** will be held August 29-30, 2017, at the Hilton Garden Inn and Conference Center, Manhattan. The workshop is designed to improve your knowledge of physiological processes; management decisions that impact reproductive success; and the application of reproductive technologies. Program details will be available soon at www.AppliedReproStrategies.com or contact Sandy Johnson (sandy@ksu.edu; 785-462-6281).

↪ Join us for the 3rd annual **AS&I Family and Friends Reunion to be held on Friday, October 13, 2017**, from 5:30 – 9:30 p.m. at the Stanley Stout Center, 2200 Denison Avenue, Manhattan, Kansas. Last year's event was truly amazing with more than 1,000 family and friends reuniting at the event. This year the Don L. Good Impact Award will be presented to Sharon Schwartz. Other activities will include great food, live music, Junior Wildcat Barn Yard and more surprises!! Watch for more information and a registration form, coming soon to www.asi.ksu.edu/familyandfriends.

CALENDAR OF UPCOMING EVENTS		
Date	Event	Location
May 25, 2017	K-State Cattle Feeders College	Scott City, KS
June 6-8, 2017	HACCP Workshop	Manhattan
June 6, 2017	KSU Youth Horse Judging Camp – Beginners Section	Manhattan
June 7-8, 2017	KSU Youth Horse Judging Camp – Advanced Section	Manhattan
June 7-9, 2017	K-State Livestock Judging Camp	Manhattan
June 12-14, 2017	K-State Livestock Judging Camp	Manhattan
June 14-17, 2017	AS&I Leadership Academy	Manhattan
June 15, 2017	State Livestock Nominations Due (Swine, Sheep, Goats, and Commercial Heifers)	
June 16-18, 2017	K-State Livestock Judging Camp	Manhattan
July 7-8, 2017	Dr. Bob Hines Kansas Swine Classic	Manhattan
July 12-14, 2017	KASLA Premier Program	
August 19-20, 2017	Kansas Livestock Sweepstakes	Manhattan
August 29-30, 2017	Applied Reproductive Strategies in Beef Cattle Conference	Manhattan
October 13, 2017	AS&I Family and Friends Reunion	Manhattan

WHAT'S NEW.....

Management Minute “Sometimes It’s Not About the Money”

☞ **Management Minute** – Chris Reinhardt and Justin Waggoner, Ph.D., Beef Systems Specialist

“Sometimes It’s Not About the Money”

If you have an employee who seems to continually be bothering you about not being paid enough, there are usually two possibilities. 1) You are a tightwad and you are not paying them enough; or 2) the person is disgruntled about their role in the organization. To find out if the answer is number 1, make a few phone calls to managers you trust in your general geography and find out what your neighbors are paying for similar jobs in your industry. If you are within 50 cents or so per hour, then move on to answer number 2. Some people are just better employees than others. If this person is worth more than the ‘scale’, you had better pay more to keep them.

But “pay” can come in many forms. You can “buy” an employee’s loyalty and general job satisfaction with many perks other than another few cents or bucks per hour. Make sure your insurance, savings investment, and/or profit sharing plans are at least in line with the industry. This is especially important if this person has a family to look after. Non-monetary benefits include things like flexible time off. Those early mornings and long days are a lot easier to take if a person knows they can take Thursday afternoons off for a child’s ballgame or whatever.

What about goals? Have you asked your employee what they want out of this position? They may want to move up in the organization or have opportunities for a management role elsewhere. You can be selfish about this or you can take on the role of mentor and teacher. By taking care of your employee and training them for a leadership role they will most certainly be a better employee, and will have a harder time leaving for a different job. And even if they do leave for a different opportunity, they will give such a glowing report on your leadership and team approach, you can be certain to find a good, young person to replace them.

The question you need to ask yourself is “Do you really want this person around for the long haul?” If you DO, take some time to privately evaluate your plans, and then take some more time one-on-one with this employee to find out their long-term needs and goals. If you DON’T want this person to remain in the organization, you still need to get your plans in order because after you inform this person they are not what your organization needs, you had better have a pretty good plan set up to attract a quality person to replace them.

For more information, contact Justin Waggoner at jwaggon@ksu.edu.

Feedlot Facts “Ionophore and Direct-Fed Microbial Use in the Commercial Cattle Feeding Industry”

☞ **Feedlot Facts** – Justin Waggoner, Ph.D., Beef Systems Specialist

“Ionophore and Direct-Fed Microbial Use in the Commercial Cattle Feeding Industry”

A number of different non-nutritional feed additives are currently used in the cattle feeding industry. Ionophores (lasalocid, monensin, and laidlomycin propionate) are among the most common feed additives used. These compounds selectively inhibit specific types of ruminal bacteria which results in improved feed efficiency, average daily gain, and reduced risk of acidosis during the feeding period. A recent survey of consulting nutritionists conducted by Samuelson et al., (2016), which summarized responses from 24 consulting nutritionists (servicing more than 14 million head annually) reported that 92.3% of their clients use some type of ionophore in the receiving diet and 97.3% used an ionophore in the finishing diet. The most commonly used ionophore in receiving diets was monensin (77.3%) followed by lasalocid (22.7%). All of the nutritionist surveyed used monensin in the finishing diet if an ionophore was used. Approximately 55% of the nutritionist surveyed used the same ionophore in both receiving and finishing diets, while the remaining 45% used different ionophores based on cattle type and diet. The majority of nutritionists surveyed also reported that direct-fed microbials (probiotics) were used by their clients in receiving (62.5%) and finishing rations (59.6%).

For more information, contact Justin Waggoner at jwaggon@ksu.edu.

- ↪ The Department of Animal Sciences and Industry at Kansas State University is seeking applicants for the position of **Assistant Professor, Sheep and Meat Goat Extension Specialist**. This is a full-time, 12-month tenure track position. Position is available September 1, 2017 (negotiable). Review of applications begins May 31, 2017, and continues until position is filled. For position announcement, go to http://www.asi.k-state.edu/about/jobs/17_KSUAssistantProfessorSheepandMeatGoat_PositionAnnouncement.pdf. To apply, go to <http://careers.k-state.edu/cw/en-us/job/501112/assistant-professor-sheep-and-meat-goat-extension-specialist>. For more information, contact Dr. Joel DeRouchey, search committee chair, at jderouch@ksu.edu or 785-532-2280.
- ↪ The Department of Animal Sciences and Industry at Kansas State University is seeking applicants for the position of **Assistant Professor, Meat Science**. This is a full-time, 12-month tenure track position. Review of applications begins July 2, 2017, and continues until position is filled. For position announcement, go to http://www.asi.k-state.edu/about/jobs/17_KSUAssistantProfessor_MeatScienceAnnouncement.pdf. To apply, go to <http://careers.k-state.edu/cw/en-us/job/501191/assistant-professor-meat-science>. For more information, contact Dr. Travis O'Quinn, search Committee Chair, at travisquinn@ksu.edu or 785-532-3469.
- ↪ **Growing-Season Prescribed Burning Has No Negative Effects on Soil Cover or Plant Species Composition Compared with Conventional Spring Burning** - The objective was to monitor the effects of three consecutive years of growing-season prescribed fire (August or September) on soil cover and basal plant cover of native grasses, shrubs and forbs. Nine fire-management units (12 ± 6 acres) were burned at one of three prescribed-burning times: early spring (4/1), mid-summer (7/30), or late summer (9/1). Plant species composition and soil cover were assessed annually each July using a modified step-point technique.
Bottom Line... Compared to traditional prescribed burning in the spring, burning during the summer months resulted in no negative changes in percentage of bare soil, litter, or basal plant cover. Growing season prescribed fire is temporally compatible with intensive, early stocker grazing systems and has reportedly been associated with strong suppression of undesirable plant species such as sericea lespedeza. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information contact, KC Olson (785-532-1254; kcolson@ksu.edu) or Bob Weaber (785-532-1460; bweaber@ksu.edu).
- ↪ **Zelnate on Arrival Could Decrease the Likelihood of Subsequent Pulls in Suspect Bovine Respiratory Disease Complex Cases** - The purpose of this study was to evaluate the effectiveness of Zelnate, an immune-stimulant at initial processing or as therapy in high risk feeder calves. Heifers (n = 283; initial body weight 520 ± 39 lb) were sorted by body weight and randomly assigned to treatments. Treatments consisted of Zelnate (Bayer Healthcare, Animal Health Division, Shawnee Mission, KS) administered at initial processing. A second population of treatments was generated based on rectal temperature as the animals were visually pulled for illness. Calves that had a rectal temperature of greater than or equal to 104°F at first pull received Baytril 100 (Bayer Healthcare, Animal Health Division, Shawnee Mission, KS) or Baytril 100 and Zelnate. Similarly, calves that did not have a rectal temperature of 104°F were either not treated at all (respiratory observed, no Zelnate) or administered only Zelnate (respiratory observed with Zelnate). Heifers were housed in dirt surfaced pens with 6 pens per treatment and 15 heifers per pen. Heifers were weighed at days 14 and 62.
Bottom Line... These results suggest that Zelnate used only in combination with metaphylaxis on arrival and not as a component of Bovine Respiratory Disease Complex treatment could decrease the likelihood of additional pulls in suspect Bovine Respiratory Disease Complex cases. View the complete research report at www.asi.ksu.edu/cattlemensday. For more information contact, Dale Blasi (785-532-5427; dblasi@ksu.edu).
- ↪ **Length of Aging has a Greater Effect than Lactic Acid Treatment on Color Stability of Beef Chuck Muscles** - The objective of this study was to determine the effect of a lactic acid carcass wash on the color stability of beef chuck rolls. Beef chuck rolls were collected from a commercial abattoir, treated with water or lactic acid, vacuum packaged and randomly assigned to an aging period (0, 14, 21, and 28 days) in the dark at 35-39°F during which, external color was measured. At the conclusion of the aging period, chucks were cut into steaks and used for a seven-day simulated retail display. During this display, a trained sensory panel evaluated redness and percent discoloration in addition to instrumental color measurements (lightness, redness, and yellowness).
Bottom Line... The application of lactic acid washes negatively impacts the color of the treated chuck roll surface, resulting in a less red external color. However, the treatment does not impact the redness or discoloration of steaks cut from treated chuck rolls. Length of aging appears to have the greatest effect on color stability of beef chuck muscles under retail display conditions. For more information contact, Terry Houser (785-532-1253; houser@ksu.edu) or Travis O'Quinn (785-532-3469; travisquinn@ksu.edu).

↪ **Evaluating the Inclusion Level of Medium Chain Fatty Acids to Reduce the Risk of PEDV in Complete Feed and Spray-Dried Animal Plasma** - Research has confirmed that chemical treatments, such as medium chain fatty acids (MCFA) and commercial formaldehyde, can be effective to reduce the risk of porcine epidemic diarrhea virus (PEDV) cross-contamination in feed. However, the efficacy of MCFA levels below 2% inclusion is unknown. The objective of this experiment was to evaluate if a 1% inclusion of MCFA is as effective at PEDV mitigation as a 2% inclusion or formaldehyde in swine feed and spray-dried animal plasma (SDAP). Treatments were arranged in a 4 × 2 × 7 plus 2 factorial with 4 chemical treatments: 1) PEDV positive with no chemical treatment, 2) 0.325% commercial formaldehyde, 3) 1% MCFA, and 4) 2% MCFA. The two matrices were: 1) complete swine diet and 2) SDAP; with 7 analysis days: 0, 1, 3, 7, 14, 21, and 42 post inoculation; and 1 treatment each of PEDV negative untreated feed and plasma. Matrices were first chemically treated, then inoculated with PEDV, and stored at room temperature until being analyzed by RT-qPCR. The analyzed values represent threshold cycle (CT), at which a higher CT value represents less detectable RNA. All main effects and interactions were significant. Feed treated with MCFA, regardless of inclusion level, had fewer detectable viral particles than feed treated with formaldehyde. However, the SDAP-treated with either 1% or 2% MCFA had similar concentrations of detectable PEDV RNA as the untreated SDAP, while the SDAP treated with formaldehyde had fewer detectable viral particles. The complete feed had a lower quantity of PEDV RNA than SDAP (39.5 vs. 35.0 for feed vs. SDAP, respectively). Analysis day also decreased the quantity of detectable viral particles from d 0 to 42, (33.2 vs. 44.0, respectively).

Bottom Line... In summary, time, formaldehyde, and MCFA all appear to enhance RNA degradation of PEDV in swine feed and ingredients; however, their effectiveness varies within matrix. The 1% inclusion level of MCFA was as effective as 2% in complete feed, but neither were effective at reducing the magnitude of PEDV RNA in SDAP. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by R.A. Cochrane, S.S. Dritz, J.C. Woodworth, A.R. Huss, C.R. Stark, M. Saensukjaroenphon, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, J. Bia, Q. Chen, J. Zhang, P.C. Gauger, R.J. Derscheid, D.R. Magstadt, P. Arruda, A. Ramirez, R.G. Main, and C.K. Jones.)

↪ **Effects of Increasing Copper from Tri-basic Copper Chloride or a Copper-Amino Acid Complex on Growth Performance of Nursery Pigs** - A total of 665 pigs [Group 1; 350 barrows (DNA 200 × 400; initially 14.1 lb)] and [Group 2; 315 barrows and gilts (DNA 241 × 600; initially 11.4 lb)] were used to determine the effects of added Cu source and level on nursery pig performance. There were five pigs per pen and 10 replications per treatment in group 1 and 5 pigs per pen and 9 replications per treatment in group 2. Pens of pigs were allotted by BW to 1 of 7 dietary treatments arranged as a 2 × 3 factorial plus a control diet, with main effects of Cu source (IntelliBond-C; Micronutrients, Indianapolis, IN or Mintrex-Cu; Novus, St. Charles, MO) and Cu level (75, 150, or 225 ppm). Diets were corn-soybean meal-based and were fed in meal form in 2 phases (d 0 to 14 and 14 to 35). All diets contained a trace mineral premix formulated to contribute 17 ppm of Cu from CuSO₄ in the complete diet.

Bottom Line... Overall (d 0 to 35), there were no Cu source × level interactions observed. Increasing Cu increased ADG and final BW. The increase in ADG with no effect on ADFI resulted in a tendency for improved F/G with increasing added Cu in the diet. There were no effects of Cu source on growth performance. Because the growth effects were linear, it is unknown from our study if increasing added Cu beyond 225 ppm would further improve growth. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by C.B. Carpenter, J.C. Woodworth, J.M. DeRouchey, M.D. Tokach, R.D. Goodband, S.S. Dritz, and J.L. Usry.)

↪ **Diet Formulation Method Influences the Response to Increasing Net Energy for Growing-Finishing Pigs** - The objective of this study was to compare the effects of increasing dietary net energy (NE) in growing-finishing diets with maintaining a standardized ileal digestible (SID) Lys:NE ratio or not adjusting this ratio and keeping SID Lysine (Lys) constant across increasing NE density. A total of 150 pigs (Line 600 Duroc × Line 241, DNA, Columbus, NE) were used in a 91-d trial. Pens of pigs were blocked by gender and BW before being randomly assigned to treatments with two pigs per pen and 15 pens per treatment. Treatment diets included a low-energy negative control diet and a 2 × 2 factorial arrangement of treatments with main effects of increasing dietary NE (medium vs. high) and formulation method (constant SID Lys:NE ratio vs. constant percentage SID Lys). Increasing NE increased daily NE intake and improved F/G with both formulation methods; however, ADG and HCW only increased when a constant SID Lys:NE ratio was maintained as dietary NE increased.

Bottom Line... These results demonstrate the importance of maintaining a constant Lys:NE ratio when changing the NE of the diet for growing pigs. More information is available on this experiment and others in the KSU Swine Day Report at www.KSUswine.org. (This study conducted by D.A. Marçal, M.D. Tokach, S.S. Dritz, J.C. Woodworth, R.D. Goodband, and J.M. DeRouchey.)

AS&I Faculty Spotlight



Jessie Vipham (jessiev@k-state.edu; 785-532-3486)
Assistant Professor/Feed the Future Innovation Lab

Jessie was raised on a registered Angus ranch in Northeastern Nevada. Growing up in a rural part of the country, Jessie was highly active in 4-H and FFA and held several offices at the local, county, and state level for both organizations. Her major focus was her beef and sheep projects, but she also participated in livestock judging and public speaking. Jessie graduated from Kansas State University with a B.S. in Agricultural Business in 2009. She decided to extend her education and received her M.S. (2011; Meat Science) and PhD (2015; Animal Science) from Texas Tech University. In her time at Texas Tech, Jessie discovered a passion for International research, and began to focus her efforts towards food security research in Latin America. Jessie joined the Department of Animal Science and Industry at Kansas State University in August of 2015. Her appointment is 100% research as a member of the Kansas State Feed the Future Innovation Lab-Collaborative Research on Sustainable Intensification (SIIL).

Jessie's graduate training is in food microbiology and food safety. As a graduate student her research focused on applied meat safety—including pre- and post-harvest interventions, pathogen monitoring and control, and baseline research—and food security. She has been involved in food security research in Mexico, Costa Rica, Honduras, and the Bahamas; which includes constructing pathogen baselines for local markets and federally inspected/municipal slaughter facilities, developing sustainable livestock production systems (farm to table), and conducting “train the trainer” education courses (basic food hygiene, HACCP, GMPs). Jessie's research at KSU will be based on developing sustainable agricultural systems, investigating methods to strengthen human nutrition and food safety, and creating capacity building and training programs for six target countries in Africa and Asia (Cambodia, Bangladesh, Burkina Faso, Ethiopia, Senegal, and Tanzania).

Jessie is a country girl at heart and enjoys spending time on her family's ranch as much as possible. She maintains her own small herd of registered Angus mother cows there as well. She also enjoys traveling both international and domestic, cooking, and spending time with her adorable dog, Gus.



Laman Mamedova (mamedova@k-state.edu; 785-532-3716)
Research Assistant Professor/Ruminant Nutrition, Dairy

Dr. Laman Mamedova pursued her B.S. in Biology and M.S. in Molecular Biology from Baku State University. She earned her PhD in Biochemistry at the Institute of Physiology, Azerbaijan National Academy of Science. She completed her Postdoctoral training at the Department of Life Science, Bar Ilan University, Israel (1999-2002). Dr. Mamedova fulfilled the opportunity to work as a research scientist in Molecular Recognition Section, National Institute of Diabetes, Digestive and Kidney Diseases, National Institute of Health, Bethesda, MD (2002-2007).

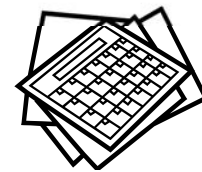
Dr. Mamedova joined the Kansas State University in August 2007 as a Research Associate. In 2008, she was promoted to Research Assistant Professor with a 100% research appointment. Her primary research responsibilities are to implement the use of molecular biology tools to study metabolic physiology and pharmacology. In completing these responsibilities, she trains graduate and undergraduate students. Within the same appointment, she also helps obtain extramural funding to support her research. Her teaching responsibilities include a course in molecular biology at the graduate level, and mentoring undergraduates involved in research. Dr. Mamedova teaches an ASI865 course every other fall semester. She is also provides service at the department, institution, and national level. Dr. Mamedova collaborated with other research groups across universities in the US and abroad, including Canada, Germany, Israel, and Turkey. Currently she is collaborating on a newly-funded project with a research group from Physiology Department of Eskisehir Osmangazi University, Turkey.

Dr. Mamedova's research focus is using molecular biology tools to study metabolic physiology and pharmacology at the cell culture level in order to apply findings to dairy cattle physiology, health, and nutrition.

When her trusty tie-dye lab coat fails to work its magic and an experiment turns south, she works out her frustrations at K-State Recreational Center. In her spare time, Laman enjoys painting, reading and designing jewelry.

What Producers Should Be Thinking About.....

WHAT PRODUCERS SHOULD BE THINKING ABOUT IN JULY.....



BEEF -- *Tips by Dale Blasi, Extension Beef Specialist*

Cowherd Nutrition

- Provide plenty of clean, fresh water.
- Provide free-choice mineral to correct any mineral deficiencies or imbalances.
- ✓ Monitor intake to insure levels are consistent with label specifications.
- Monitor grazing conditions and rotate pastures if possible and/or practical.
- If ammoniated wheat straw is planned for winter needs, follow these rules:
- ✓ Best time is immediately after harvest, prior to weather deterioration.
- ✓ Ammoniation process is temperature sensitive, fastest during hot days.
- ✓ Apply 3% Anhydrous Ammonia (60 pounds/ton of straw).
- ✓ Do **not** ammoniate wheat hay or any other intermediate or high quality forage; production of imidazole can cause cattle hyperactivity and death.
- ✓ Will double crude protein content, enhances intake, and be cost effective.
- Consider early weaning if drought conditions develop and persist.
- Consider creep feeding only if cost effective.

Herd Health

- Monitor and treat Pink Eye cases.
- Provide fly control. Consider all options, price and efficiency will dictate the best option(s) to use.
- Monitor and treat foot rot cases.
- Avoid handling and transporting cattle during the hottest part of the day-reduce heat stress.
- Vaccinate replacement heifers for Brucellosis if within proper age range (4 - 10 months).
- Continue anaplasmosis control program (consult local veterinarian).

Forage/Pasture Management

- Check and maintain summer water supplies.
- Place mineral feeders strategically to enhance grazing distribution.
- Check water gaps after possible washouts.
- Harvest hays in a timely manner, think quality and quantity.
- Harvest sudan and sudan hybrids for hay in the boot stage (normally three to four feet in height). It is a good idea to run a routine nitrate test on a field before harvesting hay.
- Plan hay storage placement wisely. Putting hay conveniently near feeding sites reduces labor, time demands, and equipment repair cost.

General Management

- Good fences and good brands make good neighbors.
- Check equipment (sprayers, dust bags, oilers, haying equipment) and repair or replace as needed. Have spare parts on hand, down time can make a big difference in hay quality.

*We need your input! If you have any suggestions or comments on **News from KSU Animal Sciences**, please let us know by e-mail to lschrein@ksu.edu, or phone 785-532-1267.*