



# K News from KSU Animal Sciences

☞ **SowBridge** - If you work in or with breeding and gestation units, gilt development systems, or farrowing barns, the SowBridge program is for you. This program helps improve your understanding of important topics and increase productivity in your breeding herds and farrowing systems. Since 2007, the series has reached producers and industry professionals across the U.S. and around the world. Sessions are recorded and the audio is provided to subscribers as it becomes available.

SowBridge 2022-2023 runs from February 2022 through January 2023. Registrations are accepted anytime during the year. SowBridge is provided via 12 monthly electronic presentation sessions by swine industry experts. Session recordings ensure subscribers don't miss a thing.

The SowBridge Series' \$200 fee includes all 12 sessions and supporting materials. Additional subscriptions from the same operation are half that cost. The registration deadline is Jan. 18, 2022, to ensure participants will receive materials for the first session on Feb. 2. For a complete schedule and registration form, visit [www.KSUswine.org](http://www.KSUswine.org). For more information, contact Joel DeRouchey (785-532-2280; [jderouch@ksu.edu](mailto:jderouch@ksu.edu)).

☞ **Kansas 4-H Small Livestock EID Tag Orders** – The deadline to order small livestock EID tags is quickly approaching on January 28! Payment must accompany orders for them to be accepted. Tag orders received after the listed deadline will be considered a special order, and there may be a delay in getting those tags delivered. It is a 6-8 week turnaround from the time orders are received until the tags arrive on campus. We do not maintain a stock of tags – they are ordered based on the individual county orders received. The mailing address and deadlines may be found on the top of the order forms.

Several important EID tag resources may also be found on the K-State Youth Livestock Program website, <https://www.asi.k-state.edu/research-and-extension/youth-programs/kansas-4-h-eid-tags.html>. The resources include the order forms, tag application instructions, applicator configuration, best practices for tag retention, and information on utilizing EID technology at the local level.

State accepted tags – there has been no change in the 4-H/EID tags that will be accepted for nomination to the Kansas Junior Livestock show and the Kansas State Fair, except for a new meat goat tag. Due to some concerns with the previous ribbon tag, we have worked diligently with Allflex to provide another option and will be transitioning to the tag piloted last year. The visual (male) portion of the tag is a small round piece, but you will be able to use the same red total tagger. Both types of tags will be accepted in state nominated animals (ribbon tags and new round tags). So, if you still have some of the ribbon tags left, you may use them in state nominated animals this year.

It is important that counties/units use their oldest tags first. Additionally, each Extension unit will need to keep an accurate record of the animals/families in which each tag is applied, per the acknowledgement signature on the tag order form. Only Kansas 4-H 840 EID tags will be accepted in cattle and swine, with 982 tags being used in sheep and goats. If you have old cattle 982 tags, please refrain from using them in state nominated animals.

For more information contact Lexie at [adhayes@ksu.edu](mailto:adhayes@ksu.edu) or 785-532-1264.

Department of Animal Sciences and Industry

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January 2022 issue



# UPCOMING EVENTS...

↵ The **2022 K-State Swine Profitability Conference** has been scheduled for Tuesday, February 8, 2022, at the Stanley Stout Center, Manhattan, KS. The schedule includes:

9:15 a.m.	Coffee and Donuts
9:30 a.m.	Welcome
9:45 a.m.	US and Global Meat/Pork Outlook <i>Joe Kerns, CEO/Founder of Partners for Production Agriculture, Ames, IA</i>
10:30 a.m.	Schwartz Farms, Inc.: Our Family Business and Entering the Kansas Pork Industry <i>Tim Schwartz and Dr. Annie Lerner, Sleepy Eye, MN</i>
11:15 a.m.	Growth and Success in the Swine Industry <i>Dr. Daryl Olsen, Audubon-Manning Veterinary Clinic, Audubon, IA</i>
12:00 noon	Lunch
1:15 p.m.	K-State Student Success with Swine Industry Careers <i>Dr. Cassie Jones and Dr. Jason Woodworth, Kansas State University</i>
2:00 p.m.	Dunn Swine LLC: Our Story and Continuing a Swine Farm Legacy <i>Leon and Janice Dunn Family, St. John, KS</i>
3:00 p.m.	Adjourn

Pre-registration fee is \$25 per participant by January 24; registration at the door is \$50 per participant. The complete schedule and online registration information can be found at [www.KSUSwine.org](http://www.KSUSwine.org). For more information, contact Lois at [lschrein@ksu.edu](mailto:lschrein@ksu.edu) or 785-532-1267.

↵ **K-State Winter Ranch Management Seminar Series** - The 2022 Winter Ranch Management Seminar Series includes a series of presentations focused on enhancing profit in beef production and a 'Town Hall' question-and-answer session where producers can ask questions to local/district and state extension specialists. For each location, registration begins at 5 pm with a meal at 5:30 pm. The program will follow wrapping up at 8 pm. Dates and locations for the seminars include:

- February 8 – K-State Research and Extension Center, 1232 240<sup>th</sup> Avenue, Hays
- February 10 – Morris County Community Building, 612 US-56 Highway, Council Grove
- February 15 – Blue Valley High School Ag Ed Center, 2 Ram Way, Randolph
- February 24 – Buffalo Bill Cultural Center, 3083 US 83, Oakley

Please RSVP to selected location contacts by close of business one week before the event. Registration fees and payment forms may vary by site. Contact your local host contact for registration/RSVP details. Online updates about the series can be found at [www.KSUSBeef.org](http://www.KSUSBeef.org). For more information, contact Dale Blasi ([dblasi@ksu.edu](mailto:dblasi@ksu.edu); 785-532-5427).

↵ The **51<sup>st</sup> Annual LMIC Stockmen's Dinner** will honor Pat Koons as Stockman of the Year. The dinner will be held on Thursday, March 3, at the Stanley Stout Center. Go to [www.asi.ksu.edu/stockmensdinner](http://www.asi.ksu.edu/stockmensdinner) for the latest schedule and registration.

↵ **Make plans to attend Cattlemen's Day 2022** – The 109<sup>th</sup> annual Cattlemen's Day will be hosted Friday, March 4, 2022. The trade show and educational exhibits will open at 8 a.m. in Weber Arena.

Registration for KSU Cattlemen's Day will be \$20 per person in advance or \$30 per person at the door. Morning refreshments and lunch are included with registration. A complete schedule will be coming soon to [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday) or call 785-532-1267.

If you are interested in exhibiting at Cattlemen's Day or have any questions, please contact Dale Blasi ([dblasi@ksu.edu](mailto:dblasi@ksu.edu); 785-532-5427).

↵ The **45<sup>th</sup> Annual Legacy Bull and Heifer Sale** will be March 4, 2022, at 4:00 p.m. at the Stanley Stout Center. Visit [www.asi.ksu.edu/bullsale](http://www.asi.ksu.edu/bullsale) for more information, as it becomes available, including the sale catalog.

# UPCOMING EVENTS...

- ✦ The **2022 Kansas Junior Producer Day** dates have been set! We are excited to return to hosting in-person events this spring. Kansas Junior Beef Producer Day will be Saturday, March 5, with Kansas Junior Sheep Producer Day scheduled for Saturday, March 19. Both events will be hosted in Weber Hall on the K-State campus in Manhattan. These events are one-day educational events for families to learn more about the selection and management of a specific specie. Youth, adults, extension agents, project leaders, and volunteers are invited to attend! Presentations will be provided by K-State faculty, staff, students, extension agents, and guest speakers. Topics range from selection, to nutrition, to meat science and showmanship. Everyone who plans to attend must register, including both youth and adults. The cost is \$15/person by the deadline, or \$20 after the deadline for both events. Only those who register by the deadline will receive a t-shirt. An optional YQCA instructor-led training and state livestock nomination session will be offered at the end of the day. K-State COVID policies in effect at the time of the event will be followed. Tentative schedules and registration information are available on the @ksuylp Facebook page and the KSU YLP website: <https://www.asi.k-state.edu/research-and-extension/youth-programs/ks-jr-producer/index.html>. For more information, contact Lexie Hayes at [adhayes@ksu.edu](mailto:adhayes@ksu.edu) or 785-532-1264.
- ✦ **Livestock County Fair Management Clinic** - The biennial Livestock County Fair Management Clinic will be hosted virtually April 5-6, 2022. This clinic is designed for county fair board members, Extension agents, and volunteers involved in local livestock fair management and leadership. The program consists of a forum for open communication for individuals working with livestock at their local fairs. Although some of the topics can be applied generally to the county fair, this program focuses on the livestock perspective. K-State faculty, staff, fair board members, and extension agents will facilitate discussion directly related to livestock activities at local fairs in Kansas. The program is geared towards the input and participation of county fair board members, superintendents, and extension agents, so fair board members and superintendents are highly encouraged to attend! The program has been divided over two evenings, scheduled for 7-9 PM, with different topics being covered each night. This year, each evening will open with a general session, followed by concurrent round table discussions. It would be advantageous for counties to have several individuals attend to cover all the breakout sessions. The sessions will be recorded and available to attendees after the program. The program is free, but participants need to register online by March 31 at [https://kstate.qualtrics.com/jfe/form/SV\\_2hKAXBfaQHYPQHK](https://kstate.qualtrics.com/jfe/form/SV_2hKAXBfaQHYPQHK). For more information, contact Lexie Hayes ([adhayes@ksu.edu](mailto:adhayes@ksu.edu); 785-532-1264) or Joel DeRouchey ([jderouch@ksu.edu](mailto:jderouch@ksu.edu); 785-532-2280).
- ✦ Watch the **KSU ASI Headlines** for December 2021 and find out the latest happenings in the department. Follow the link at <https://youtu.be/1aBFi0cuamI>. For questions about the department, contact Dr. Mike Day, ASI Department Head, at 785-532-1259; [mlday@ksu.edu](mailto:mlday@ksu.edu).

## CALENDAR OF UPCOMING EVENTS

Date	Event	Location
January 18, 2022	Registration deadline for SowBridge	
January 28, 2022	Deadline to order small livestock EID tags	
February 8, 2022	K-State Swine Profitability Conference	Manhattan
February 8, 2022	K-State Winter Ranch Management Series	Hays, KS
February 10, 2022	K-State Winter Ranch Management Series	Council Grove, KS
February 15, 2022	K-State Winter Ranch Management Series	Randolph, KS
February 24, 2022	K-State Winter Ranch Management Series	Oakley, KS
March 3, 2022	LMIC Stockman's Dinner	Manhattan
March 4, 2022	KSU Cattlemen's Day	Manhattan
March 4, 2022	Legacy Bull and Heifer Sale	Manhattan
March 5, 2022	Junior Beef Producer Day	Manhattan
March 19, 2022	Junior Sheep Producer Day	Manhattan
April 5-6, 2022	Livestock County Fair Management Clinic	

# WHAT'S NEW...

## **Management Minute** – Justin Waggoner, Ph.D., Beef Systems Specialist

### *“Winter Safety”*

January and February are some of the coldest months of the year and often bring extreme weather conditions that can be challenging for agricultural workers that work in the elements. Falls, slips, and trips continue to be one of the leading causes of workplace injuries (U.S. Bureau of Labor Statistics, 2019) and although falls and slips can occur anytime, extra precautions are required during the winter months. Hypothermia is real, especially for those that work outside for extended periods. Safety experts suggest that clothing be worn in layers to retain body heat. However, how and what type of layers those clothes are made of is important. At least three layers is recommended, cotton or other breathable synthetic fiber should be the first or base layer. Wool or down is suggested for the middle layer, and the third or outer layer should be composed of material that will block the wind, such as the nylon outer shell found on many ski-jackets.

Portable heaters are often used as heat sources in many shops and barns. Portable heaters are one of the most common causes of carbon monoxide poisoning and structural fires. If heaters are used in confined spaces, always remember that ventilation is required to avoid carbon monoxide poisoning. Additionally, the areas where heaters are used should be checked for combustible materials and heaters should never be left unattended.

The U. S. Department of Labor, OSHA website offers other tips and resources for working outside in the winter and may be accessed at <https://www.osha.gov/winter-weather/preparedness>.

For more information, contact Justin Waggoner at [jwaggon@ksu.edu](mailto:jwaggon@ksu.edu).

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

### *“Cold Stress Increases Energy Requirements”*

The New Year often brings with it some of the coldest months of the year. Cattle are most comfortable within the thermoneutral zone when temperatures are neither too warm nor cold. During the winter months, cattle experience cold stress anytime the effective ambient temperature, which takes into account wind chill, humidity, etc., drops below the lower critical temperature. The lower critical temperature is influenced by both environmental and animal factors, including hair coat and tissue insulation (body condition). The table below lists the estimated lower critical temperatures of cattle in good body condition with different hair coats. In wet conditions, cattle can begin experiencing cold stress at 59°F, which would be a relatively mild winter day. However, if cattle have time to develop a sufficient winter coat, the estimated lower critical temperature under dry conditions is 18°F. Cold stress increases maintenance energy approximately 1% for each degree below the lower critical temperature, but does not impact protein, mineral, or vitamin requirements. Thus, maintenance energy requirements of cattle may increase by 15-20% on those exceptionally cold and windy days that commonly occur in January and February. Increased maintenance energy requirements essentially means that less energy is available for production (gain), which translates to lower ADG, increased Feed:Gain, and greater Days on Feed.

Estimated lower critical temperatures for beef cattle	
Coat Condition	Critical Temperature
Wet or summer coat	59°F
Dry fall coat	45°F
Dry winter coat	32°F
Dry heavy winter coat	18°F

For more information, contact Justin Waggoner at [jwaggon@ksu.edu](mailto:jwaggon@ksu.edu).

## **Assistant Professor (2 positions) and Assistant or Associate Professor (1 position) in Animal Science (Job #511957)** –

The Animal Sciences & Industry Department houses the largest undergraduate degree program at Kansas State University in combination with a robust research focus across most primary disciplines and species/products in the animal and food sciences. We are seeking applicants for three 12-month, tenure-track faculty positions, each 60% Teaching, 40% Research. At least two positions will be at the Assistant Professor level and potentially one position at the Assistant or Associate Professor level; commensurate with experience. The positions will be located in Manhattan, KS. The successful individuals will contribute primarily to the department's land-grant missions in teaching and research. Teaching responsibilities will be consistent with the successful individual's training, interests, and needs of the Department. Teaching expectations will include teaching undergraduate and/or graduate classes and serving as a faculty advisor to undergraduates. The successful individuals are expected to lead productive research programs relevant to animal agriculture in either reproductive physiology, nutrition, animal genetics, or other related disciplines, train graduate students, and participate in relevant interdisciplinary activities. Review of positions begins February 1, 2022. For more information, contact Bob Goodband, Search Committee Chair, at [goodband@ksu.edu](mailto:goodband@ksu.edu) or 785-532-1228. To apply, go to <https://careers.pageuppeople.com/742/cw/en-us/job/511957/assistant-professor-2-positions-and-assistant-or-associate-professor-1-position-in-animal-science>.

# WHAT'S NEW...

- ↗ **Head, Western Kansas Research-Extension Centers (Job #511995)** – The WKREC provide interdisciplinary research and extension activities at Hays, Colby, Garden City, Tribune, and various satellite locations. The successful candidate will facilitate integration among research and extension functions and ensure that research and extension faculty and staff work effectively together to communicate applied research-based information to constituents. This is a 12-month position located in Hays, KS. Review of positions begins February 25, 2022. For more information, contact Bob Weaber, Search Committee Chair, at [bweaber@ksu.edu](mailto:bweaber@ksu.edu) or 785-532-2281. To apply, go to <https://careers.pageuppeople.com/742/cw/en-us/job/511995/department-head-western-kansas-researchextension-centers-wkrec>.
- ↗ **Effect of Floor Feeding Creep Feed on the Growth Performance and Mortality of Pigs After Weaning** – A total of 264 litters corresponding to 2,497 nursery pigs were used in a 40-d trial (4-d pre-weaning and 36-d post-weaning) to determine the effect of floor feeding different pellet sizes of creep feed or lactation feed on the growth performance and mortality of pigs after weaning. Treatments were applied in the farrowing house for 4 d prior to weaning and consisted of a control (no creep feed), standard (1/8 in.) creep pellet, large (1/2 in.) creep pellet, or sow lactation feed. For each treatment, approximately 0.50 lb of creep feed per day, equally divided into 2 feedings (AM and PM) was provided on the mat in farrowing stalls. At weaning (approximately d 19 of age), pigs were transported to the nursery facility and randomized to pen within creep feeding treatment group. A total of 96 pens (48 feeders) were used, with one barrow pen and one gilt pen per feeder. Thus, feeder (2 pens) was the experimental unit. There were 26 pigs per pen (52 pigs per feeder) and 12 replications per creep feeding treatment. For creep feeding during lactation, floor feeding different pellet size creep feed or lactation feed had no effects on the percentage of piglets that consumed creep feed (eaters). For the first week post-weaning, pigs fed standard or large pellet creep feed had increased ADG compared to pigs fed sow lactation feed or no creep feed. However, this was not driven by an improvement in ADFI. This resulted in an improved F/G for pigs fed large pellet creep feed compared to pigs fed sow lactation feed or no creep feed, with pigs fed standard pellet creep feed intermediate. No differences in ADG, ADFI, or F/G were observed throughout the remainder of the nursery period. On a per pig placed basis, pigs fed large pellet creep feed had increased total BW gain, ADG, and improved F/G compared to pigs fed sow lactation feed, with the other two treatment groups intermediate. This response was a direct reflection of decreased total removal rate for pigs fed large pellet creep feed. In summary, floor feeding large pellet creep feed in lactation appears to improve nursery pig growth performance and fallout rates compared to creep feeding sow lactation feed, with standard pellet creep feed or no creep feed having an intermediate effect. More information is available on this experiment and others in the KSU Swine Day report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by Madie R. Wensley, Mike D. Tokach, Robert D. Goodband, Jordan T. Gebhardt, Jason C. Woodworth, Joel M. DeRouchey, Matt Allerson, Mariana Menegat, and Andy Boeschert.)
- ↗ **Effects of Providing a Liquid Sensory Attractant to Suckling Pigs in Lactation and After Weaning on Post-Weaning Pig Performance** – A total of 28 litters corresponding with 355 nursery pigs were used in 42-d trial (17-d pre-weaning and 24-d post-weaning). This trial was conducted to determine the effect of providing a sensory attractant liquid to suckling pigs on the underline of sows after farrowing and in late lactation, and after weaning on post-weaning feed intake and growth. Treatments were arranged in a 2 × 2 × 2 factorial with main effects of: 1) pre-weaning treatment (without or with attractant); 2) post-weaning treatment (without or with attractant); and 3) body weight category (light or heavy). Overall, pre-weaning liquid sensory attractant did not have a significant effect on piglet weaning weight or post-weaning growth performance. Likewise, post-weaning application had limited effects on the growth performance of pigs after weaning. Liquid sensory attractant pre-weaning increased the percentage of lightweight pigs that lost weight from weaning to d 3 by approximately 16 percentage points, whereas liquid sensory attractant pre-weaning decreased the percentage of heavyweight pigs that lost weight after weaning by approximately 17 percentage points. This interaction diminished by d 7. Significance was also detected for the main effect of BW category. A greater percentage of heavyweight pigs lost weight on d 3 and d 7 compared to lightweight pigs. In summary, liquid sensory attractant that was applied pre- and post-weaning had limited effects on the growth performance of pigs; however, varying responses were observed for the percentage of pigs that lost weight immediately after weaning. Strategies to reduce the number of pigs that lose weight after weaning warrant further investigation. More information is available on this experiment and others in the KSU Swine Day report at [www.KSUswine.org](http://www.KSUswine.org). (This study conducted by Madie R. Wensley, Ty Kim, Mike D. Tokach, Robert D. Goodband, Jason C. Woodworth, Joel M. DeRouchey, Denny McKilligan, Nathan Upah, and Jordan T. Gebhardt.)

# WHAT'S NEW...

- ☞ **The Effect of Live Yeast and Yeast Extracts on Antimicrobial Susceptibilities of Fecal *Escherichia coli* of Nursery Pigs Weaned from Sows Fed Diets with or without Yeast Additives** - A total of 340 weaned pigs were used in a 45-d study to evaluate previous sow treatment (control vs. yeast additives) and nursery diets with or without added yeast-based pre- and probiotics on antimicrobial resistance (AMR) patterns of fecal *Escherichia coli*. At placement in the nursery, pigs were housed by pen based on sow treatment and randomly assigned to 1 of 2 dietary treatments with 5 pigs per pen and 17 pens per treatment. Treatments were arranged in a 2 × 2 factorial with main effects of sow treatment (control vs. yeast-based pre- and probiotic diet; 0.10% ActiSaf Sc 47 HR+ and 0.025% SafMannan) and nursery treatment (control vs. yeast-based pre- and probiotic diet; 0.10% ActiSaf Sc 47 HR+, 0.05% SafMannan, and 0.05% NucleoSaf from d 0 to 7, then concentrations were lowered by 50% from d 7 to 24). All pigs were fed a common diet from d 24 to 45 post-weaning. The *E. coli* was isolated from fecal samples and species confirmation was accomplished by PCR detection of *uidA* and *clpB* genes. Microbroth dilution method was used to determine the minimum inhibitory concentrations (MIC) of *E. coli* isolates to 14 different antimicrobials. Isolates were categorized as either susceptible, intermediate, or resistant based on Clinical and Laboratory Standards Institute guidelines. A three-way interaction of sow treatment × nursery treatment × sampling day was observed for ciprofloxacin, gentamicin, sulfisoxazole, and trimethoprim/sulfamethoxazole. Fecal *E. coli* isolated from pigs of the yeast-supplemented sow group had increased MIC to nalidixic acid and a tendency for increased MIC to ciprofloxacin and gentamicin. Yet, when yeast additives were fed in the nursery there was reduced fecal *E. coli* AMR to azithromycin and chloramphenicol. All fecal *E. coli* isolates were considered susceptible to all antimicrobials, except tetracycline on d 5. In conclusion, feeding sows live yeast and yeast extracts could potentially impact fecal *E. coli* AMR in their progeny. Furthermore, feeding live yeast and yeast additives in the nursery may alleviate the AMR of azithromycin and chloramphenicol of *E. coli* isolated from nursery pig fecal material. More information is available on this experiment and others in the KSU Swine Day report at [www.KSUSwine.org](http://www.KSUSwine.org). (This study conducted by Jenna A. Chance, Jordan T. Gebhardt, Joel M. DeRouchey, Raghavendra G. Amachawadi, Victor Ishengoma, T.G. Nagaraja, Mike D. Tokach, Jason C. Woodworth, Robert D. Goodband, Qing Kang, and Joseph A. Loughmiller.)
- ☞ **Effects of Increasing Dietary Alpha-Linolenic Acids on Nursery Pig Growth Performance and Response to Immune Challenge** - A total of 350 weanling pigs were used in a 41-d study to evaluate growth performance and immune response of nursery pigs fed diets containing increasing alpha-linolenic acids using O3 Trial Feed, a source of omega-3 fatty acids. At weaning, pigs were randomly assigned to 1 of 5 dietary treatments with 5 pigs per pen and 14 replications per treatment. Treatments were arranged in a completely randomized design. Dietary treatments consisted of increasing levels (0, 1, 2, 3, or 4%) of O3 Trial Feed. This resulted in omega-6:3 fatty acid ratios ranging from approximately 25:1 to 4:1. Treatment diets were fed in 3 phases with phase 1 fed from d 0 to 13, phase 2 from d 13 to 22, and phase 3 from d 22 to 41. On d 25, two pigs per pen were injected with 20 µg of *Escherichia coli* (*E. coli*) lipopolysaccharide (LPS) per kg BW and one pig per pen was injected with 2 mL of saline to serve as a control. Body temperature was recorded from the 3 pigs per pen prior to the injection (hour 0) and 2, 4, 6, and 12 h after injection. On d 25 a blood sample was collected 4 h post injection from pigs injected with the LPS challenge to determine IL-1β levels in the serum. For overall growth performance, there were no differences observed in ADG, ADFI, or F/G. Temperature increased at 2 h post LPS injection, then decreased as time from the LPS injection increased, but dietary treatment did not influence change in body temperature or IL-1β. These results indicate dietary alpha-linolenic acid levels did not influence growth performance or immune response to a LPS challenge. More information is available on this experiment and others in the KSU Swine Day report at [www.KSUSwine.org](http://www.KSUSwine.org). (This study conducted by Jenna J. Bromm, Mike D. Tokach, Jason C. Woodworth, Robert D. Goodband, Joel M. DeRouchey, and Jordan T. Gebhardt.)
- ☞ **Use of O3 Trial Feed to Reduce Omega-6:3 Ratio in PRRS-Virus Challenged Nursery Pigs** - A total of 1,056 pigs, originating from an active PRRSV-positive sow farm, were used in a 46-d study to evaluate growth performance of nursery pigs fed diets containing increasing levels of O3 Trial Feed, a source of omega-3 fatty acids (alpha-linolenic acid). At placement in the nursery, pens of pigs were randomly assigned 1 of 4 dietary treatments with 22 pigs per pen and 12 replications per treatment. Treatments were arranged in a completely randomized design. Dietary treatments included increasing levels of O3 Trial Feed (0, 0.75, 1.5, and 3%) with pigs remaining on treatments throughout the 4 dietary phases over the 46-d study. Overall, pigs fed increased O3 Trial Feed had increased ADG and ADFI and improved F/G. Pigs fed increasing O3 Trial Feed also had decreased total removals and mortalities. In summary, O3 Trial Feed improved growth performance and reduced mortality in PRRSV-positive nursery pigs. More information is available on this experiment and others in the KSU Swine Day report at [www.KSUSwine.org](http://www.KSUSwine.org). (This study conducted by Jenna J. Bromm, Mike D. Tokach, Jason C. Woodworth, Robert D. Goodband, Joel M. DeRouchey, Chad W. Hastad, Zach B. Post, and Jordan T. Gebhardt.)

# ASI FACULTY SPOTLIGHT...



**Jim Drouillard** ([jdrouill@k-state.edu](mailto:jdrouill@k-state.edu); 785-532-1204)

**Professor/Beef Cattle Nutrition**

Jim Drouillard joined the K-State faculty in 1995, and he, his wife Patti, daughter Kameron, and son Jason are residents of Olsburg, KS.

A two-time Gator, Jim received his Bachelor's (Animal Science) and Master's (Animal Breeding) degrees from the University of Florida in 1985 and 1986, and his Ph.D. from the University of Nebraska in 1989. Jim has responsibilities in teaching (20%) and research (80%) and is faculty coordinator for the Beef Cattle Research Center. His research has focused on feedlot cattle production, emphasizing grain processing, pre-harvest food safety, byproduct utilization, and the effects of diet on cattle health, performance, carcass quality, and meat composition.



**Chris Mullinix** ([cmullinix@k-state.edu](mailto:cmullinix@k-state.edu); 785-532-1917)

**Instructor/Livestock Judging Coach**

In the fall of 2013, Chris Mullinix returned to Kansas State University as an Instructor of Animal Sciences, the head Livestock Judging Team Coach, and Co-Coach of the Meat Animal Evaluation Team. Under his leadership, both squads have proven to be amongst the nation's elite, including a 2020 National Championship for the Livestock Team and a 2021 National Championship in Meat Animal Evaluation.

Chris was born and raised on a diversified cattle and farming operation in central Maryland where his family continues to run a Hereford cow herd, an Angus herd, and a small feedyard. Chris received his Animal Science degree at Kansas State University where he was a member of the 1995 National Champion Intercollegiate Livestock Judging Team and was recognized as the contest High Individual. For the sixteen years prior to his return to Manhattan, Chris was an Associate Professor on faculty with Butler Community College where he has coached more than 30 national contest winning collegiate teams and was recognized with numerous teaching/student advising awards at a regional and national level.

In his free time, Chris is an avid K-State sports fan and enjoys working with youth and breeders at livestock events. To date, Chris has judged livestock exhibitions in 42 different states and Canada, including prestigious events such as the North American in Louisville, the American Royal, the Houston Livestock Show and Rodeo, the Fort Worth Stock Show, and Denver's National Western.

Chris is married to another K-State Animal Science graduate, Elissa (Good) Mullinix. Elissa completed both her B.S. and M.S. degrees in the department and currently teaches agriculture and science coursework at Manhattan High School in addition to her duties as advisor to its FFA program. Chris and Elissa are blessed with three children – Mason, Kinsley, and Cameron.

# WHAT PRODUCERS SHOULD BE THINKING ABOUT

## WHAT PRODUCERS SHOULD BE THINKING ABOUT IN MARCH...

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

- ☑ Manage calving pens and pastures to minimize human, cow, and calf stress. Stay organized.
- ☑ An observation schedule should be implemented for calving first-calf heifers and cows. First-calf heifers should be checked every two to three hours.
- ☑ Sanitation is key to reducing and/or eliminating calf scours. An excellent calving pasture management plan by Dr. David Smith from the University of Nebraska - Lincoln, can be found at <https://beef.unl.edu/a95e3e40-93f8-4893-a296-d706fb4aec9a.pdf>.
- ☑ Make sure every calf consumes adequate colostrum during the first four to 12 hours after birth.
- ☑ Keep accurate calving records, including cow identification (ID), calf ID, birth date, calving difficulty score, and birth weight. Other traits to consider recording are teat and udder scores, calf vigor score, and other pertinent information. This information, along with Angus sire information, is vital for enrolling cattle into the AngusSource<sup>SM</sup> program.
- ☑ Calving books are essential sources of information; make sure you have a backup copy.
- ☑ Body condition score (BCS) cows. Thin and young cows will need extra energy to maintain yearly calving interval.
- ☑ If cow diets are going to be shifted from low- (poor quality forage or dormant grass) to high-quality forage (lush green grass) programs, begin a grass tetany prevention program at least three weeks prior to the forage switch.
- ☑ Given the high price of mineral supplements, conduct a needs assessment of your cow herd. Moreover, closely monitor daily intake to ensure that it is consistent with label directions.
- ☑ When making genetic selections, use the most recent National Cattle Evaluation (NCE) and herd records judiciously.
- ☑ If new bulls are purchased, now is the time to start preparing them for their first breeding season. Bulls need to be properly vaccinated and conditioned to be athletic. Moderate body condition with abundant exercise is ideal.
- ☑ After calving and before breeding, vaccinate cows as recommended by your veterinarian.
- ☑ Plan to attend beef production meetings.

*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](mailto:lschrein@ksu.edu) or phone 785-532-1267.*