



# News from KSU Animal Sciences

January, 2017

## News from KSU Animal Sciences

### In This Issue

- Upcoming Events
- Management Minute
- Feedlot Facts
- 2016 KSU Cattlemen's Day Article Featured
- 2016 KSU Swine Day Articles Featured
- Faculty Spotlight
- What Producers Should Be Thinking About...

**Department of Animal Sciences and Industry**  
 Kansas State University  
 218 Weber Hall  
 1424 Claflin Road  
 Manhattan, KS 66506  
 785-532-6533  
[www.asi.ksu.edu](http://www.asi.ksu.edu)

## UPCOMING EVENTS...

↪ **K-State's Winter Ranch Management Series Set for January and February** - This seminar series, hosted in early 2017, will highlight "Successful Strategies for Enhancing Profit" for beef producers and allow producers to ask questions of their local, district and state extension specialists. With lower expected revenues from the sale of calves in 2016 and 2017 compared to 2014-15 prices many producers are seeking information on ways to improve their operations profit potential. With that in mind, the 2017 K-State Winter Ranch Management series of meetings will be a series of short comments from extension educators on profit enhancing strategies practices for beef producers. The meetings will also feature a popular 'town-hall' style question and answer session between Kansas' cattle producers and extension specialists.

Please RSVP to your selected location contacts by close of business **one week before** the event. Locations with fewer than 40 confirmed attendees may be cancelled. Registration fees and payment forms may vary by site. Contact your local host contact for registration/RSVP details. Meal is included in the registration fee. Locations and dates include:

**Mound City**, Mound City First Baptist Church, Jan. 26; 5:30 – 8:30 pm

RSVP by January 19 to Megan Westerhold ([mwesterhold@ksu.edu](mailto:mwesterhold@ksu.edu)) or Chris Petty ([cgp@ksu.edu](mailto:cgp@ksu.edu))

**Syracuse**, Hamilton Co. Fairgrounds, Feb. 7; 5:00 – 8:30 pm MT

RSVP by January 31 to Jenifer Sexson ([jsexson@ksu.edu](mailto:jsexson@ksu.edu))

**Salina**, K-State Polytechnic Conference Center, Feb. 14; 11:00 am – 3:15 pm

RSVP by February 8 to Katelyn Brockus ([kbrockus@ksu.edu](mailto:kbrockus@ksu.edu)); Anthony Ruiz ([anruiz@ksu.edu](mailto:anruiz@ksu.edu)); Neil Cates ([ncates@ksu.edu](mailto:ncates@ksu.edu)); or Kashly Schweer ([kschweer@ksu.edu](mailto:kschweer@ksu.edu))

**Olsburg**, McCormick Elementary, Feb. 15; 5:00 – 8:30 pm

RSVP by February 8 to Pottawatomie County Extension at 785-457-3319

**Atwood**, Rawlins County Fair Building, Feb. 21; 5:00 – 8:30 pm

RSVP by February 14 to JoEllyn Argabright ([joargabright@ksu.edu](mailto:joargabright@ksu.edu))

Online updates to the Seminar information can be found on the Animal Sciences website at: [www.ksubeef.org](http://www.ksubeef.org). For more information contact Bob Weaber ([bweaber@ksu.edu](mailto:bweaber@ksu.edu) or 785-532-1460).

↪ The **KSU Dairy Days** will be held on January 31, 2017, and February 2, 2017. The Kansas Dairy Commission is the lunch sponsor for both meetings. The Reno County meeting will be held in conjunction with the Reno County DHIA Annual Meeting.

The program will be held on Tuesday, January 31, at the Seneca Community Center in Seneca, KS. To pre-register for this event, contact the Meadowlark Extension District Office at 785-336-2184 or 785-364-4125 or email [jholthau@ksu.edu](mailto:jholthau@ksu.edu). On Thursday, February 2, the program will be held at the Whiteside Amish Community Building in Whiteside, KS. Please pre-register by contacting the Reno County Extension Office at 620-662-2371 or [darrenbusick@ksu.edu](mailto:darrenbusick@ksu.edu). Both days will begin at 9:45 a.m. and adjourn at 3:00 p.m.

For a complete schedule or more information, visit <https://www.asi.ksu.edu/research-and-extension/dairy/dairy-days.html> or contact Luis Mendonca ([mendonca@ksu.edu](mailto:mendonca@ksu.edu); 785-532-2652).



- ↪ The 2017 **K-State Swine Profitability Conference** will be held on Tuesday, February 7, 2017. The location has changed to the Stanley Stout Center, 2200 Denison Avenue, Manhattan, KS. The schedule is as follows:
- 9:15 a.m. Coffee and Donuts
  - 9:30 a.m. Our Barn Door is Open – How Telling our Farm Story is Rebuilding Trust  
*Brad Greenway, Mitchell, SD*
  - 10:30 a.m. The Changing Landscape of the U.S. Swine Industry: What we are doing to keep our Producers Competitive  
*Barry Kerkaert, Pipestone Veterinary Services, Pipestone, MN*
  - 11:15 a.m. The Power of the Past, Leading People on the Farm and Surviving an Unknown Future  
*Nathan Smith, KS Smith Farms, Plains, KS*
  - 12:00 noon Lunch
  - 1:15 p.m. Pork Market Strategy Update  
*Kent Bang, AgStar Financial Services, Omaha, NE*
  - 2:15 p.m. Will the Real Pig Farmer Please Stand Up? We Want to Know You.  
*Chef Alli, ChefAllis.com*
  - 3:00 p.m. Adjourn

Pre-registration fee is \$25 per participant by January 30; with registration at the door \$50 per participant. The complete schedule and on-line registration information can be found at [www.KSUswine.org](http://www.KSUswine.org). For more information, contact Lois Schreiner at [lschrein@ksu.edu](mailto:lschrein@ksu.edu) or 785-532-1267.

- ↪ The **Tri-State Cow-Calf Symposium 2017** will be held on Friday, February 10, at the Goodland Elks Lodge in Goodland, KS. The program begins at 9:00 a.m. (MST) and will conclude by 4:00 p.m. The symposium will highlight presentations on “Succeeding in a Challenging Beef Industry.” Pre-registration is \$30 per participant and is due by February 3. For more details and a complete schedule, visit [www.KSUbeef.org](http://www.KSUbeef.org).

- ↪ The **SowBridge Breeding Herd Education Series** is being offered for 2017-2018. The SowBridge program is intended for people involved in managing or caring for boars, sows, and/or their litters, including operation owners, employees, technicians, managers, and technical service providers.

This year-long program is offered by subscription only with a January 16 deadline to ensure participants will receive materials for the first session on February 1, 2017. Before each session, subscribers receive details on accessing the speaker’s presentation online. Those who request it also receive a CD containing that session’s presentation. For the session itself, most participants will call a toll-free conference line to listen to and interact with presenters. Each session begins at 11:30 a.m. Central Time and lasts approximately 45 minutes.

The SowBridge Series cost of \$250 (U.S.) includes all 12 sessions and supporting materials. Additional subscriptions from same operation are half that cost. 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)).

- ↪ **2017 PorkBridge Grow-Finish Education Series** now available. The 11th year of the PorkBridge distance education series begins Feb. 2, 2017. This low-tech program features timely and intriguing topics presented by recognized industry experts. Operating through the collaboration of 11 land-grant universities, PorkBridge reaches producers and industry professionals across the country and around the world in an every other month series of six sessions. 2017 dates include February 2; April 6; June 1; August 3; October 5; and December 7. Sessions generally are scheduled for the first Thursday of the designated month, starting at noon Central Time. New this year is a change in session length to a maximum of 60 minutes.

The cost is \$125 (U.S.) for the entire 2017 PorkBridge program year. Subscription deadline is January 16 to assure receipt of program materials in time 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)).

- ↪ **Make plans to attend Cattlemen’s Day 2017** –The 104<sup>th</sup> annual Cattlemen’s Day will be held Friday, March 3, 2017. All events for Cattlemen’s Day will be held in Weber Hall on the Kansas State University campus. The Trade show and educational exhibits will open at 8:00 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. For more information and a schedule, visit <http://www.asi.k-state.edu/events/cattlemens-day/index.html> 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) or Jim Drouillard ([jdrouill@ksu.edu](mailto:jdrouill@ksu.edu); 785-532-1204).

- ↪ **Dedication of new Purebred Beef Barn** – Plans are underway for the dedication of the new KSU Purebred Beef Barn. The Dedication Ceremony will begin at 3:00 p.m. on Friday, March 3, following Cattlemen’s Day. Watch for more details.

- ↪ The **40<sup>th</sup> annual Legacy Bull and Heifer Sale** will be held on Friday, March 3, 2017, at the conclusion of the dedication for the new Purebred Beef Barn. The sale will begin at 4:00 p.m. at the Stanley Stout Center. For more information or a sale catalog, contact Tyler Leonhard at 785-565-1881 or [john56@ksu.edu](mailto:john56@ksu.edu).
- ↪ The **2017 Kansas Junior Swine Producer Day** is scheduled for Saturday, March 11, 2017 in Weber Hall on the Kansas State University campus. This event will be a fun filled, educational day of activities in which youth, parents, swine project leaders, and adults can increase their knowledge and experience of swine production and management. This interactive, hands-on educational event will stimulate enthusiasm and provide a foundation for the management and care of youth swine projects. Presentations and demonstrations will be provided by K-State faculty and graduate students, as well as our guest speaker Kade Hummel. Kade works for JBS United as the Lindner United sales manager and was formerly a field representative for the National Swine Registry for seven years. He has judged many prestigious shows across the country including the Houston Barrow Show, National Western, and numerous other state and county fairs.
- Topics that will be covered include project selection, meat science, swine breeds and ear notching, proper grooming and clipping, nutrition and daily feeding, Youth PQA+ certification, daily care, the state nomination processes and update, VFD implications for show feed, and showmanship. A complimentary lunch and t-shirt will be provided for participants. Registration is due by February 22, 2017, and is \$15/person. Registrations received after February 22nd cannot be guaranteed a t-shirt and will be \$20/person. More information, a promotional flyer, and registration information may be found on the K-State Youth Livestock Program website: [www.youthlivestock.ksu.edu](http://www.youthlivestock.ksu.edu) under Kansas Junior Producer Days. Participants may register online at <http://www.asi.k-state.edu/research-and-extension/youth-programs/ks-jr-producer/index.html>. This event has been added to the university Pulse calendar. For more information, contact Lexie Hayes (785-532-1264; [adhayes@ksu.edu](mailto:adhayes@ksu.edu)).
- ↪ The **2017 Kansas Junior Meat Goat Producer Day** is scheduled for Saturday, March 25, 2017, in Weber Hall on the Kansas State University campus. This event will be an interactive, educational day in which youth, parents, meat goat project leaders, and adults can increase their knowledge about youth meat goat production and management. K-State faculty, staff, and guest speakers will cover topics such as market and breeding project selection, nutrition, health and wellness, the state nomination processes and updates, showmanship, and grooming. All ages and skill levels are invited to attend. A complimentary lunch and t-shirt will be provided for all participants. Registration is due by March 3, 2017, and is \$15/person. Registrations received after March 3 cannot be guaranteed a t-shirt and will be \$20/person. More information, a promotional flyer, and registration information may be found on the K-State Youth Livestock Program website: [www.youthlivestock.ksu.edu](http://www.youthlivestock.ksu.edu) under Kansas Junior Producer Days. Participants may register online at <http://www.asi.k-state.edu/research-and-extension/youth-programs/ks-jr-producer/index.html>. This event has been added to the university Pulse calendar. For more information, contact Lexie Hayes (785-532-1264; [adhayes@ksu.edu](mailto:adhayes@ksu.edu)).
- The K-State Sheep & Meat Goat Center will be having its annual sale on the same date, following the Junior Meat Goat Producer Day. The program schedule will allow participants who would like to participate in both events to do so.

CALENDAR OF UPCOMING EVENTS		
Date	Event	Location
January 26, 2017	K-State Winter Ranch Management Series	Mound City, KS
January 31, 2017	KSU Dairy Days	Seneca, KS
February 1, 2017	SowBridge Breeding Herd Education Series – Session 1	
February 2, 2017	PorkBridge Grow-Finish Education Series – Session 1	
February 2, 2017	KSU Dairy Days	Whiteside, KS
February 7, 2017	K-State Winter Ranch Management Series	Syracuse, KS
February 7, 2017	KSU Swine Profitability Conference	Manhattan
February 10, 2017	Tri-State Cow/Calf Symposium	Goodland, KS
February 14, 2017	K-State Winter Ranch Management Series	Salina, KS
February 15, 2017	K-State Winter Ranch Management Series	Olsburg, KS
February 21, 2017	K-State Winter Ranch Management Series	Atwood, KS
March 3, 2017	KSU Cattlemen's Day	Manhattan
March 3, 2017	KSU Purebred Beef Barn Dedication	Manhattan
March 3, 2017	Legacy Bull and Heifer Sale	Manhattan
March 11, 2017	KS Junior Swine Producer Day	Manhattan
March 25, 2017	KS Junior Meat Goat Producer Day	Manhattan



# WHAT'S NEW.....

## Management Minute "Tis the season: New Year's Resolutions"

↗ **Management Minute** – Justin Waggoner, Ph.D., Beef Systems Specialist  
***"Tis the season: New Year's Resolutions"***

It's the New Year and the popular thing to do is to "resolve to do something better" this year than last year, and in years past---not a bad idea. The problem with New Year's Resolutions isn't the Resolutions themselves, but maybe the motivation, or the lack thereof, behind them.

I have a friend who used to drink too much, and then drive too much. He knew on all levels this was a bad thing, but he continued anyway. But he finally quit drinking because he was diagnosed with diabetes. He made a good resolution, with effective follow-through, not just because it was a good idea---it had *always* been a good idea---but because of a really good motivation. He had plenty of good, intellectual, reasons to quit this destructive behavior years ago, but it took a hard, in-your-face, reality check to make it happen.

Is that a model that we should follow? Definitely not. But it is a good metaphor for our business relationships and hard decisions that we put off until cold, hard, reality force our hand. Do we wait to do the right things only after our business is 'diagnosed' with serious problems, or are we proactive at seeking out discord and dysfunction in our work teams?

Only intentionality can overcome inertia. The workplace will continue to grind forward unless we invest something to intercept and alter its direction. The investment in prevention is much less than the cost of a cure down the road.

For more information, contact Justin at [jwaggon@k-state.edu](mailto:jwaggon@k-state.edu).

## Feedlot Facts "The Decision"

↗ **Feedlot Facts** – Justin Waggoner, Ph.D., Beef Systems Specialist  
***"The Decision"***

If you've been growing your calves since fall weaning, you've likely been considering the next steps: sell them as feeders or finish them out.

The markets need to be considered in that decision process, as well as your access to feed resources and facilities. Depending on how you've managed your calves will also weigh into the decision. If you've used an accelerated growing program, with a target gain of 2.75-3.0 lbs/day, you may be able to step up and finish at least a portion of the cattle ahead of the normal May-June volume of finished calves. Performance, both past and future, will drive your ability to get the calves finished on time.

On the other hand, if you've grown the calves at a more moderate pace, they may work well in the marketplace as feeders. And if you've grown them at a very conservative pace, the lighter end may work for someone as stockers. Regardless, be sure to know your target market prior to selling, and group the calves according to your intended market. Analysis repeatedly shows that the 2 biggest drivers of feeder calf value in the auction marketplace are size and uniformity of lots.

If you decide to finish the calves, and you are determined to hit the April and May markets, it is critical to begin stepping up the grain fraction of the diet. Process the grain thoroughly to improve efficiency of utilization. In order to maintain a good mix of otherwise dry, fine, particles, it is helpful to include a moist ingredient, such as silage or wet byproducts.

Most importantly, consider all factors (grain, feeder, and fed cattle markets, forage supply, byproduct cost and availability, time and labor going into calving and planting seasons) when making this critical decision. Finishing cattle requires focus and attention to detail and should not be taken lightly. However, given sufficient planning and coordination, seeing your calf crop through to finish can be a rewarding experience.

For more information, contact Justin at [jwaggon@k-state.edu](mailto:jwaggon@k-state.edu).

↪ **How Do Alternative Pressures Affect the Accuracy of the Pressed Juice Percentage at Predicting Consumer Juiciness Rating?**– To evaluate three different compression pressures for the Pressed Juice Percentage (PJP) method of objective beef juiciness measurement and determine the relationship of these values to consumer sensory scores for juiciness.

Strip loin steaks used were from five quality treatment categories: USDA Prime, Certified Angus Beef, Choice, Select, and Select from phenotypical Angus cattle. Steaks were assigned to one of three PJP pressure groups - 8.8 lbs, 17.6 lbs, and 26.4 lbs. Additionally, a paired steak was used for consumer evaluation. Testing for PJP and consumer evaluation was conducted on steaks that were cooked to 160° F. The PJP values of the paired samples were evaluated to determine the relationship between consumer sensory scores and PJP.

**Bottom Line...** These results indicate that modifying the pressure used during PJP testing had a large effect on the observed percentage of juiciness quantified from samples. However, few differences among quality treatment groups were observed. Additionally, PJP was a poor predictor of consumer juiciness scores, regardless of pressure, likely due to limited amount of variation in consumer scores in the current study. View the complete research report at [www.asi.ksu.edu/cattlemensday](http://www.asi.ksu.edu/cattlemensday). For more information contact, Travis O'Quinn (785-532-3469; [travisquinn@ksu.edu](mailto:travisquinn@ksu.edu)).

↪ **Evaluating the Impact of VevoVital and/or CRINA as Potential Porcine Epidemic Diarrhea Virus Mitigation Strategies as Determined by Polymerase Chain Reaction Analysis and Bioassay** - Feed and feed ingredients have been shown to be potential vectors of porcine epidemic diarrhea virus (PEDV). Potential strategies to mitigate the risk of disease transmission via feed and feed ingredients would be valuable to the swine and feed milling industries. Therefore, the objective of this experiment was to determine the impact of VevoVital (5,000 ppm; DSM Nutritional Products Inc., Parsippany, NJ), CRINA (200 ppm; DSM Nutritional Products Inc., Parsippany, NJ), and a combination of both products (COMBINATION; 5,000 ppm VevoVital and 200 ppm CRINA) as feed additives with potential to mitigate the risk of PEDV, in swine gestation diet (FEED) and spray-dried porcine plasma (SDPP) as determined by real time quantitative reverse transcriptase polymerase chain reaction (qRT-PCR) analyzed at seven sampling days post laboratory inoculation (d 0, 1, 3, 7, 14, 21, and 42) and bioassay. There was a marginally significant treatment x feed matrix x day interaction, in which the cycle threshold (Ct) value increased over time in the diet when treated with the COMBINATION, whereas, there was no increase over time observed in SDPP. There was a highly significant feed matrix x day interaction in which the Ct increased over time in FEED, whereas, there was very little increase over time observed in SDPP. Additionally, there was a marginally significant treatment x feed matrix interaction. Overall, the COMBINATION was most effective at reducing the quantity of genetic material as detected by qRT-PCR. Virus shedding was observed in the d 7 post-inoculation SDPP COMBINATION treatment, as well as d 0 FEED COMBINATION treatment. No other treatment bioassay room had detectable RNA shed and detected in fecal swabs or cecal contents (d 1, 3, 7, 14, and 21 post-laboratory inoculation FEED, COMBINATION).

**Bottom Line...** In summary, the combination of CRINA and VevoVital enhanced degradation of PEDV RNA in swine feed, but had no impact on RNA degradation in SDPP. Furthermore, both untreated feed and feed treated with the combination of CRINA and VevoVital caused infection at d 0 post-laboratory inoculation; however, neither set of samples was infective at d 1 post-laboratory inoculation. 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 J.T. Gebhardt, J.C. Woodworth, C.K. Jones, M.D. Tokach, J.M. DeRouchey, R.D. Goodband, R.A. Cochrane, C.R. Stark, J.R. Bergstrom, P.C. Gauger, J. Bai, Q. Chen, J. Zhang, R.G. Main, and S.S. Dritz.*)

↪ **Lessons Learned from Managing Electronic Sow Feeders and Sow Body Weight Data** - As the swine industry is transitioning from individual gestation stalls to different styles of group housing, new challenges are being presented for collecting data in the gestation barn. Electronic sow feeders (ESF) are computerized feeding stations that track and dispense feed for each sow that enters the feeding station. Individual intakes for sows can be recorded, which creates an opportunity for conducting nutrition studies in gestation. A research study was conducted on a commercial sow farm in central Nebraska, where sows were group-housed with ESF. A total of 74,114 feed intake observations and 663,204 sow weights were recorded during the study.

Feed intakes were downloaded daily, with unknown errors occurring during download 13 of 149 days. Intakes had to be downloaded prior to the system reset each day or the previous data would be deleted. Zeroes observed as feed intake values indicated the sow walked through the system, but did not consume any feed. Weights were automatically recorded and stored in system software for multiple weeks at a time. Numerous challenges were presented when attempting to determine accurate sow weights generated from this system, thus two weights were manually collected on all sows and used as reference weights. The reference weights were applied to the data set to eliminate inaccurate weights based on expected weight gains.

**Bottom Line...** Using these data sets, we found that even with adequate training, parity 1 sows were reluctant to consume the assigned feed allowance immediately after placement into the pen as well as throughout the course of gestation. Parity 2 and 3+ sows had similar struggles immediately after placement. It is unknown what could be causing this type of behavior, however, as we continue to generate research within these types of feeding systems, we will continue to improve our knowledge of this system and ultimately improve animal performance. 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 L.L. Thomas, S.S. Dritz, M.D. Tokach, R.D. Goodband, J.M. DeRouchey, and J.C. Woodworth.)



**Evaluation of Dietary Phytochemicals on Growth Performance, Carcass Characteristics and Economics of Grow-finish Pigs Housed Under Commercial Conditions** - A total of 1,260 pigs (PIC 327 × 1050, initially 48.7 lb) were used in a 125-d trial to determine the effect of two dietary essential oil mixtures on the growth performance, carcass characteristics, and economics of finishing pigs. Pigs were allotted by BW and randomly assigned to 1 of 5 dietary treatments. Pigs were fed six dietary phases. Treatment 1 was the control with no feed additives and 12% of CP in the Phase 6 diet. Treatment 2 was the same formulation as treatment 1 but contained an essential oil mixture 1 (EOM 1) containing caraway, garlic, thyme, and cinnamon fed all phases. Treatment 3 was the same formulation as treatment 1 with EOM 1 fed from Phases 3 to 6 and essential oil mixture 2 (EOM 2) containing oregano, citrus, and anise fed all phases (EOM 1+2). Treatment 4 contained EOM 1 fed in all 6 phases with 16% CP in Phase 6. Treatment 5 contained ractopamine HCl (9 g/ton) with 16% CP in the Phase 6 diet. Overall (d 0 to 125), pigs fed diets with EOM 1+2 had increased ADFI compared with pigs fed the control treatment. Pigs fed the diet with EOM 1 and 16% CP had increased ADFI in comparison with the pigs fed ractopamine HCl treatment. Pigs fed the ractopamine HCl treatment had improved F/G compared with pigs fed the treatment with the EOM 1 and 16% CP and the control treatment. For carcass traits, pigs fed the treatment with EOM 1+2 had increased HCW compared with pigs fed EOM 1 and 12% CP and the control treatment. Pigs fed the treatment with ractopamine HCl also had heavier HCW compared with the control treatment. Pigs fed diets with EOM 1+2 had increased carcass ADG, compared with pigs fed the control treatment and the treatment with EOM 1 and 12% CP. Pigs fed the treatment with ractopamine HCl also had improved carcass ADG compared with pigs fed the control treatment. Pigs fed diets with EOM 1+2 had increased carcass yield compared with pigs fed the treatment with EOM 1 and 12% CP. Carcass yield was improved for the treatment with ractopamine HCl in comparison with the control treatment. Economically, feed cost per pound of gain was lower for pigs fed the control treatment compared to the treatment with EOM 1+2 and pigs fed with the ractopamine HCl treatment. Pigs fed diets with EOM 1+2 or ractopamine HCl treatment had increased gain value compared with pigs fed the control treatment. Pigs fed the ractopamine HCl treatment had increased income over feed cost in comparison with the treatments containing EOM 1 with 16% CP.

**Bottom Line...** In conclusion, the addition of EOM 1+2 improved ADFI, HCW, carcass ADG, and gain value in comparison with the control treatment. However, the increase in gain was not sufficient to overcome the increase in feed cost. The gain value improvement for the regimen with ractopamine HCl compensated for the extra feed cost resulting in a higher income over feed cost compared with the treatment with EOM 1 and 16% CP. 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 J.A. Soto, M.D. Tokach, S.S. Dritz, J.C. Woodworth, J.M. DeRouchey, and R.D. Goodband.)

# AS&I Faculty Spotlight



**Joel DeRouchey ([jderouch@k-state.edu](mailto:jderouch@k-state.edu); 785-532-2280)**  
**Professor/Extension State Leader/Swine Nutrition and Management**

Dr. Joel DeRouchey grew up on a diversified purebred swine, cattle and sheep operation in Pukwana, SD. He graduated with his B.S Animal Science from South Dakota State University in 1997 and his M.S. (1999) and Ph.D. (2001) in Swine Nutrition at Kansas State University. He was hired in 2001 as the Northeast Livestock Extension Specialist for Kansas State University. In 2004, Joel moved into the Department of Animal Sciences and Industry as a Livestock Nutrition and Environmental Management Specialist and with a 40% Extension, 40% Research, and 20% Teaching appointment. Currently, he is a full professor and has a 50% Extension and 50% Research appointment and serves as Extension State Leader.

A brief listing of Joel's Extension and Research interests involve: 1) Mentoring and training swine nutrition graduate students; 2) Conducting applied swine nutrition and management research; 3) Providing environmental information to livestock producers for regulatory and manure management compliance; and 4) Coordinating youth swine activities to increase swine industry knowledge and awareness of career opportunities in swine production.

Dr. DeRouchey is the faculty coordinator for ASI 890 and ASI 990 Graduate Student Monogastric Seminar, and is a frequent guest lecturer in ASI 535 Swine Science. He formerly taught ASI 320 Principles of Feeding. Joel works with a productive applied swine nutrition team that maintains approximately 12 MS and PhD students. Joel has co-authored 135 refereed journal papers, 348 abstracts and 531 extension publications and field day reports and a co-advisor or active committee member for 59 MS and PhD graduate programs. Joel was named to the 2013 Vance Publishing Corporation's inaugural "40 Under 40 in Agriculture" award for leadership and commitment in advancing the cause to double food production by 2050. He was also recognized in 2010 by South Dakota State University as a Distinguished Young Alumni.

Joel and his wife, Julene, have three children, James, Jenna and Jacob. They enjoy K-State football tailgating, 4-H activities, youth livestock exhibitions and currently live on a small farm near St. Mary's, KS.



**John Gonzalez ([john Gonz@k-state.edu](mailto:john Gonz@k-state.edu); 785-532-3448)**  
**Associate Professor/Meat Science**

Dr. John Michael Gonzalez grew up in the vast urban setting of San Antonio, TX. He was first introduced to agriculture during his high school years when he visited numerous classmates' ranches located throughout the state of Texas. This led Dr. Gonzalez to pursue and earn his Bachelor of Science degree in Agricultural Economics and Poultry Science from Texas A&M University. He then obtained his Master of Science degree in Animal Science from Sul Ross State University. In 2008, Dr. Gonzalez achieved his Ph.D. in Animal Sciences from the University of Florida. After earning his degree, Dr. Gonzalez spent a 9-month tenure serving as the Technical Services Manager of XL Four Star Beef, Inc. of Omaha, Nebraska. Following this experience, he returned to the University of Florida as a Postdoctoral Associate.

Dr. Gonzalez joined the Kansas State University staff in June of 2011 with a 30% teaching and 70% research appointment. Within his teaching responsibilities, Dr. Gonzalez coordinates and participates in the instruction of the department's graduate Advanced Meat Science course. Dr. Gonzalez also re-established and instructs the yearly offering of the department's Growth and Development course and assisted in establishing a molecular techniques/biotechnology course for first and second year undergraduate students.

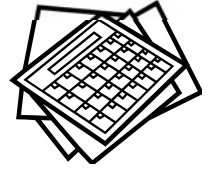
Dr. Gonzalez's research interests span two broad areas that include classical Meat Science research and utilizing livestock as models for human physiology. Within the Meat Science discipline, his interests primarily center around exploring the effects of management strategies, feeding regimens, and growth technologies on meat color and quality characteristics of red meat species. Specifically, Dr. Gonzalez utilizes molecular techniques to study the effects of muscle fiber morphometrics and the collagen compartment on meat tenderness and color characteristics. Overall, Dr. Gonzalez contributes to the Meat Science group by explaining global changes in meat quality or color by exploring muscle biology mechanisms with basic science techniques.

Dr. Gonzalez resides in Manhattan with his wife, Sara, his daughter Penelope, and two dogs, Bexar and Astro. In his free time, Dr. Gonzalez spends a good portion of his time following the United States space program. He and his wife can be found around town working on their golf game.



# 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 2 to 3 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 <http://beef.unl.edu/beefreports/symp-2003-19-XVIII.pdf>.
- Make sure every calf consumes adequate colostrum during the first 4-12 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 3 weeks prior to the forage switch.
- Given the high price of mineral supplements, conduct a needs assessment of your cowherd. Moreover, closely monitor daily intake to insure 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.*