



Meat Science

Prime Cuts

Meat Science at Texas A&M University is an interdisciplinary group focusing on food safety, quality, nutrition and value.

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Rosenthal posthumously presented Distinguished Texan in Agriculture Award

COLLEGE STATION – E.M. “Manny” Rosenthal, namesake of the Rosenthal Meat Science and Technology Center at Texas A&M University, posthumously received the 2012 Texas A&M University Distinguished Texan in Agriculture Award on Oct. 23, 2012.

The award presentation was made during the annual Rosenthal Lecture Series, which featured Rosalyn Rosenthal, Manny’s wife and longtime business partner, along with their son Billy, who shared family memories and discussed Manny’s strong work ethic and years of dedication to the meat industry and agriculture.

Manny, a proud 1942 Texas A&M graduate, was chairman emeritus of the board at Standard Meat Company in Fort Worth. He’s been honored as a distinguished alumnus at Texas A&M and was inducted in the Meat Industry Hall of Fame in 2011. He was a philanthropist, held numerous leadership roles and was passionate about serving the meat industry and giving back to education.

In 1987, the Rosenthals established the E.M. “Manny” Rosenthal Chair in meat science within the Department of Animal Science, designed to support research and education in meat science.

Dr. Larry Boleman, associate vice chancellor of Texas A&M AgriLife, said during the presentation, “The Rosenthal Meat Center and the Rosenthal chair and foundation have blessed the Department of Animal Science and the College as well. These items clearly make our program what it is today - No. 1 in the nation.”

Since the dedication of the Rosenthal Center, more than 30,000 undergraduate and graduate students have taken courses there, more than 26,000 head of livestock have been harvested, and more than 70 junior and senior meat judging teams have trained. Additionally, 100 principal investigators and professors have flowed



Jeff Savell, left, and Larry Boleman, right, present the Distinguished Texan in Agriculture Award honoring E.M. “Manny” Rosenthal to Rosalyn Rosenthal and her son Billy Rosenthal.

more than \$20 million in research through the center. More than 10,000 producers and members of industry groups have been educated and 12,000 4-H and FFA youth have been trained.

The Distinguished Texan in Agriculture Award is the highest award given from the College of Agriculture and Life Sciences. The purpose of the award is to recognize and honor agricultural leaders in Texas for their outstanding leadership and significant contributions to Texas Agriculture.

To view a video of the award presentation and the Rosenthal Lecture Series entitled “A Conversation with Roz Rosenthal,” go to http://www.youtube.com/watch?v=57Vmt5GdCbo&feature=player_embedded.



Dr. Kerri Harris receives the Distinguished Extension-Industry Service Award from Dr. James H. Hodges, executive vice president, American Meat Institute.

AMSA honors Harris with distinguished service award

CHAMPAIGN, IL – The American Meat Science Association (AMSA) honored Dr. Kerri Harris, associate professor in the meat science section of the Department of Animal Science and president/CEO of the International HACCP Alliance, as the recipient of the 2012 Distinguished Extension-Industry Service Award at the 65th Reciprocal Meat Conference on June 19, 2012, in Fargo, ND.

The award was established in 1965 to recognize outstanding achievement in meat science extension and service to the industry and is sponsored by the American Meat Institute Foundation.

Harris was nominated by Dr. Jeff Savell, Texas A&M University, who stated that “Because of her extension and industry activities and her commitment and dedication to our industry, Dr. Kerri Harris is most deserving of the AMSA Distinguished Extension-Industry Service Award.”

Graduate students instrumental in conducting National Beef Quality Audit

Approximately every five years since 1991, Texas A&M University takes part in the research and data collection for the National Beef Quality Audit (NBQA).

by Rachel Glascock
Meat science graduate student

Meat science graduate students in the Department of Animal Science who conducted the 2011 NBQA were Gatlan Gray, Russell McKeith and Melanie Moore.

According to the Beef Quality Assurance website, “These industry wide research efforts collect and analyze data and disseminate information related to the physical characteristics of finished steers and heifers arriving at harvest facilities.” Furthermore, they ensure that the results of these audits have and will be used to “identify strategies and tactics to guide further improvements in beef production.”

Dr. Jeff Savell, regents professor and holder of the E.M. “Manny” Rosenthal Chair in meat science, said, “The National Beef Quality Audit provides a target for people to measure what they’re doing and they can then figure out where they are in comparison to the rest of the industry. The NBQA provides a benchmark that we can teach and learn from.”

The NBQA has three phases that work together to create a cohesive snapshot of the industry. Phase one targets all segments of the industry including producers, feeders, packers, retailers, food service, government and allied industries, and distributors by interviewing the participants and recording their responses. Phase two looks more in depth to the beef processing plants and the actual carcass characteristics. Finally, phase three includes online and written surveys that are conducted by cattlemen and dairymen to identify the adoption of beef quality assurance management principles.

Gray, McKeith and Moore were all designated to work on phase two; however, each had very different roles within their seemingly similar assignment.

Gray was charged with the responsibility of compiling instrument grading data from 17 federally inspected plants, representing the four largest beef corporations in the United States. “What made this task particularly challenging,” Gray said, “was ‘harmonizing different types of data collected from the four corporations and compiling them all to yield the information we were seeking, not to mention working with over 2.4 million observations.’”

Moore had the opportunity to travel from plant to plant collecting individual carcass data. She obtained the majority of the same data that Gray was analyzing such as ribeye area, fat thickness, carcass weight, kidney, pelvic and heart fat, quality

grade and some of the common defects. Comparing Gray and Moore’s research, Moore’s data represented the major packing plants from various parts of the country, like Gray’s, however, the total number of carcass observations was just over 9,000, which is right in line with the traditional audits.

“Gray and Moore’s observations are so closely related that it almost comes as a surprise, all while giving the confidence that both collection methods are predictive of each other and that is a strong complement to the way we have been collecting this information in years past,” Savell said.

McKeith’s work analyzed physical characteristics collected on the harvest floor of eight different plants representing five beef packing corporations. The data collected included: hide color, significant bruising, carcass condemnations, animal identification and detention records to assess maturity. “Something I found particularly interesting is that we recorded an increase in individual animal identification when compared to previous audits,” McKeith said.

Numbers are merely numbers if they are not able to create meaning. When asked how the results of the 2011 NBQA would affect the future of the industry, Moore believes that “the data collected can be used to continue the industry’s strengths and to pinpoint areas that need improvement.”

Gray added, “With the opportunity to utilize the method of online, electronic collection of data, I foresee instrument grading data sets as being an efficient way of observing the seasonal changes of carcass characteristics that will allow a large amount of information to be reported.”

McKeith said, “The major findings of my report showed that producers are increasing the number of black-hided cattle sent to slaughter, and that our industry still needs improvement where bruising is concerned.”

Savell commends the students who worked hard to tackle this large project.

“Working with Gray, Moore and McKeith was a very good experience. I appreciate that they all worked hard and got their stuff done. It’s already available online and people can access the information.”

“It is an honor for me to get to work with all of the students in the past who have been a part of this project, and I am grateful for all the friendships I have made throughout my years of working on the quality audits.”

To view the complete National Beef Quality Audit, visit <http://bqa.org/CMDocs/bqa/NBQA.pdf>. ■



TEXAS BARBECUE CLASS

OFFERS MORE THAN COOKING & EATING

It's torturing to those walking by, it's one of the most unique experiences on campus and it's a first class treat to those fortunate enough to be 'in the club' – it is the one and only UGST 181: Texas Barbecue class.

by Rachel Glascock
Meat science graduate student

The near famous Texas Barbecue class taught at Texas A&M University through the Department of Animal Science was born in the Spring of 2009 when Dr. Jeff Savell received a request to teach a first year seminar class. In this email, it included a list of previous seminar classes and one of them was all about baseball.

Savell recalled thinking, "If you can teach a class on baseball, you can teach a class on barbecue!" Shortly after, Savell recruited Ray Riley, Rosenthal Center manager, to be his official co-conspirator in barbecue endeavors. Together, they decided to reference Robb Walsh's book, "The Legends of Texas Barbecue," and begin teaching this one-of-a-kind class in the Fall of 2009.

Little did this duo know, their new class was setting the stage for Texas A&M University to become known for their well respected, barbecue experts.

During the first semester of the class, Robb Walsh contacted Savell asking him to explain the science behind fajitas. One thing led to the other and in 2010, Walsh recruited Savell, Riley, and Davey Griffin, extension meat specialist, along with about 50 key food folks from Texas to form Foodways Texas, a group that functions to preserve, promote and celebrate the diverse food cultures of Texas. The Barbecue Summer Camp, co-hosted by Foodways Texas and Texas A&M University, has been conducted the past two summers with over 100 people on the waiting list to come to the next one scheduled for June 7-9, 2013. Camp Brisket, a new workshop specializing in that key centerpiece of Texas barbecue, will be held in January, 2013. In addition, through Texas A&M University's involvement with *Texas Monthly Magazine*, Texas A&M AgriLife has worked with the Texas Monthly BBQ Festival to provide a "BBQ Genius Counter" at the past two festivals.

Despite the hype barbecue has brought the department, if you ask Savell and Riley what the most rewarding part about the Texas Barbecue class is, aside from eating, it is undoubtedly the basic purpose of the class and that is centered on the relationships formed with the students. Savell said, "we have helped them to make this transition to college and I've enjoyed getting to know them."

Lucky for the students, their involvement with the class does not have to end with the conclusion of their first semester. Interested students can volunteer to mentor the next group of

freshman and help to prepare the weekly meals.

Chloe Geye is a junior animal science major that was enrolled in the class as a freshman in 2010 and has been an assistant ever since. "When I started the class as a freshman, I loved being able to interact and form close relationships with the professors, and that was something that was very unexpected. I thought we were just going to come and eat on a Friday, but it was definitely more than that."

Since that first semester, Geye, as well as the other mentors, has gained more responsibilities like planning the meal, shopping for the ingredients, preparing the meat, starting the grill and monitoring the cooking process. However, Geye has gone above and beyond the call of duty. She has elected to take pictures of the class and the protein of the day, as well as make instructional videos on how to prepare the protein.

It is clear that the professors and mentors love the class, but what about the current students? Hunter Meyer is a freshman animal science student who looks forward to the class every week. When asked what her favorite part of Texas Barbecue class was, she replied with a simple, one word answer: "eating!" Besides that, she thoroughly enjoys getting to know the professors and mentors, as well as becoming closer friends with her classmates.

Gatlan Gray, meat science graduate student and a UGST 181 teaching assistant, explains the learning and skill development that the class offers.

"The class offers the opportunity for students to learn about useful skill sets, such as cooking times and temperatures not only for quality, but also for food safety. Each week the students are taught various smoking, seasoning, and barbecuing techniques, in addition to major regional barbecuing differences in Texas and the United States. For example, one week we focus solely on using different types of wood to create varying smoke flavors. Then we discuss what region of Texas each of the types of wood would be used the most."

When the most challenging part about the class is only getting to spend 50 minutes with the students, it is clear that the heart of Texas Barbecue is in the right place. This class has given students the opportunity to learn about barbecue, get to know professors and make friends. As Logan Cline, sophomore animal science student explained, "the camaraderie is genuine and special, and this is the legacy the class will leave on many fortunate students."

For more information about UGST 181: Texas Barbecue, check out their website, <http://bbq.tamu.edu>, search #tamubbq on twitter, or contact Jeff Savell, j-savell@tamu.edu. ■



Smith travels to Korea, China to present on research collaborations

Dr. Stephen Smith, professor of meat science in the Department of Animal Science, visited South Korea and China from August 18-27, 2012. His trip included a visit to Daegu University in Daegu, Korea, where he presented the seminar “Carcass and Fatty Acid Composition of Corn-Fed and Yearling Fed Angus Steers.” Smith then traveled to Suwon, Korea, and presented the seminar “Overview of Research between the National Institute of Animal Science and Texas A&M University, 2006 -2012” to NIAS faculty and staff. Smith then traveled to Yan Ji, China, where he presented the seminar “Marbling: Management of Cattle to Maximize the Deposition of Intramuscular Fat” to faculty, staff and students of Yan Jian University, and discussed collaborating with scientists there to begin studying diet effects on marbling gene expression in Yanbian yellow cattle. Smith traveled around the Yan Ji area, which is close to the confluence of China, Russia, and North Korea, to learn more about beef cattle production in north-east China.



Dr. Stephen Smith was greeted at Yan Jian University in China by this welcome banner. During his trip, Smith established a collaboration with the university to begin studying diet effects on marbling gene expression in Yanbian yellow cattle.

Glascock, Gray attend International Livestock Congress - Calgary

CALGARY -- Rachel Glascock, animal science class of 2012 and current meat science graduate student, and Gatlan Gray, animal science class of 2011 and current meat science and food safety graduate student, were selected as participants of the prestigious 2012 International Livestock Congress student program held in Calgary, Alberta, Canada, this August.



Glascock and Gray had the opportunity to tour local colleges, a feed manufacturing plant, a cattle feedlot and fertilizer company, a beef processing facility, a livestock identification service and a third-party feedlot veterinarian consulting company. They listened to numerous lectures, met industry leaders and participated in a two hour student forum discussing messages that need to be communicated to the key players in the beef industry.



“The International Livestock Congress - Calgary was a great opportunity that allowed students, colleagues and future leaders from all across the world with similar interests to come together and learn about an industry that is important not only to them, but to the success and survival of the human race,” Gray said.

Glascock offered a very similar review. “Overall, the ILC 2012 was an experience that I will remember for the rest of my life. I am thankful and blessed to have received such a priceless opportunity. The fact that students and future leaders of the beef industry all gathered in Calgary for one common goal, to produce a safe and wholesome food supply that will feed an exponentially growing population, is truly amazing and provides proof that the future of the world and all mankind is in good hands.” ■



Faculty, students serve as experts at Texas A&M BBQ Genius Counter

AUSTIN -- Faculty and students from the meat science section served as barbecue experts at the 3rd annual Texas Monthly BBQ Festival held Sept. 23 in Austin. Left, Davey Griffin, Thomas Larriviere, Taylor Adcock, Clay Eastwood, Chloe Geye, Gatlan Gray and Tyler Rosser answered questions about all things barbecue at the Texas A&M BBQ Genius Counter. They offered tips, advice and techniques to barbecue pit masters and enthusiasts attending. Eastwood and Gray are teaching assistants for Texas Barbecue class and Adcock, Geye and Rosser are junior mentors.



Meat Science faculty speak at international symposium on applications of nanotechnology in food processing, safety

BOGOTA, COLOMBIA – Two members of the meat science section in the Department of Animal Science traveled to Jorge Tadeo Lozano University in Bogota, Colombia, in August 2012, to present on the various uses of nanotechnology for the manufacture and preservation of foods.

Dr. Alejandro Castillo, associate professor, and Dr. Matt Taylor, assistant professor, presented at the 1st International Symposium on New Trends in Nanotechnology, an event Castillo and Taylor helped organize in collaboration with researchers at the Jorge Tadeo Lozano University as part of ongoing activities within the parameters of the memorandum of agreement between Texas A&M and Jorge Tadeo Lozano Universities.

The symposium provided a platform for diverse discussions of differing agricultural and industrial applications for nanotechnology today and opportunities for future development and deployment of nanotechnology for the enhancement of human and animal health. Castillo and Taylor along with other researchers from Texas A&M University and universities in Colombia and Brazil discussed ongoing research in foods nanotechnology and how this new field of research and development can be used to improve food processing and safety.

“Nanotechnology research and development presents us with numerous opportunities for developing new types of functional foods, new technologies for preserving food quality, protecting food safety, and even enhancing the health of food-yielding animals,” Taylor said.

Castillo and Taylor are currently working to apply food antimicrobial-encapsulating nanotechnologies for the decontamination of fresh and minimally processed vegetables to protect these foodstuffs from pathogens such as *Escherichia coli* O157:H7 and Salmonella. Additionally, Taylor and Dr. Carmen Gomes from the Texas A&M University Department of Biological and Agricultural Engineering took the first step towards a formal collaboration for research with a Brazilian research group, seeking to apply current food antimicrobial encapsulation systems for the protection of microbiological safety of foods including various processed dairy and meat products.

Food’s nanotechnology research is a relatively recently initiated field of scientific exploration, drawing great inspiration from the work of researchers seeking to improve the delivery of various therapeutic drugs for human and animal health. In addition, food scientists have sought to improve the functionality of multiple types of ingredients in the food, from the encapsulation of antioxidants or flavors to improve their activity in the food for the sake of food quality and palatability preservation.

“Texas A&M University researchers in the College of Agriculture and Life Sciences, including Drs. Castillo and Gomes in addition to many others, are studying nano-scaled systems and building new technologies to improve or protect the quality and safety of foods, water, animals. That we’re working at such a small scale is exciting, as doors to new interactions and processes are opened that are not observed in systems that operate on the micro-scale or larger,” Taylor said.



Dr. Alex Castillo, back, second from left, and Dr. Matthew Taylor, back, second from right, along with researchers from Jorge Tadeo Lozano University discussed uses of nanotechnology for the manufacture and preservation of foods at the International Symposium on New Trends in Nanotechnology in Bogota.

Taylor presented data gathered in his research laboratory on the application of encapsulated food antimicrobials for the inhibition of the bacterial pathogen *Listeria monocytogenes* in dairy applications, and discussed how such data might be translated to meat preservation, especially as a surface spray for ready-to-eat meat products.

Castillo presented data reviewing the use of nanotechnology for the development of innovative pathogen and toxin biosensors for the detection of pathogens in foods with low limits of detection and timelines that are beginning to approach real-time detection.

Also from Texas A&M University, Dr. Mustafa Akbulut, assistant professor in the Department of Chemical Engineering, presented findings from research conducted in collaboration with Taylor and Castillo detailing the use of nano-encapsulate systems to decontaminate produce surfaces that are contaminated with pathogenic bacteria for food safety protection, the result of a U.S. Department of Agriculture-funded grant also involving Taylor, Castillo, and Luis Cisneros from the Department of Horticultural Sciences. Presentations by other researchers focused on other applications and requirements for development of nanotechnology for food applications, including regulatory agency concerns over the potential toxicity of nano-scaled engineered systems, stability of nanotechnologies prior to incorporation in the food, and labeling of nanotechnology-containing foods. ■

MEAT SCIENCE WORKSHOPS



1 BEEF 101 Beef 101, a three-day intensive hands-on program designed for anyone who has an interest in expanding their knowledge of the overall beef industry, was held May 15-17 and June 4-6 in College Station. This workshop is the leading education program about the beef industry taught in the United States. Faculty, staff and graduate students from animal science all coordinate and work to host the event. The next Beef 101 workshop will be held Dec. 5-7, 2012. For more information, go to <http://meat.tamu.edu/beef101/beef101.html>.

2 PORK 101 Meat science faculty and graduate students presented educational information at Pork 101 held May 22-24 in College Station. This workshop allowed pork and associated industry professionals a hands-on approach to learning more about the pork industry from live animal handling through pork fabrication and meat processing to palatability.

3 GRASS-FED BEEF CONFERENCE More than 50 grass-fed beef producers came to College Station for the Grass-fed Beef Conference held May 30-31 to learn more about the emerging aspect of beef production. Event organizer Dr. Rick Machen, Extension beef cattle specialist from Uvalde and professor in the department, said the primary focus of the workshop was to outline how to produce grass-fed beef. Presenting educational information from the Department of Animal Science were Ron Gill, Rick Machen, Steve Hammack, Joe Paschal, Tryon Wickersham, Tom Hairgrove, Davey Griffin and Chris Kerth.

4 BARBECUE SUMMER CAMP Foodways Texas and the Department of Animal Science teamed up for the second time to host the Barbecue Summer Camp in College Station June 8-10. Barbecue enthusiasts gathered to learn how to make the best barbecue possible, coordinated by Jeff Savell, Davey Griffin and Ray Riley.

5 CENTER OF THE PLATE The North American Meat Processor's Association and Texas A&M AgriLife Extension Animal Science brought the NAMP's Center of the Plate Training back to College on June 12-14. Instruction was led by Steve Olson, NAMP's Standards and Specification Advisor and former specialist with the USDA AMS, and Davey Griffin. This course lays out the fundamentals of how carcasses are converted to cuts commonly used in retail and foodservice.

6 LUBBOCK YOUTH BEEF 706 The 2012 Lubbock Youth Beef 706 was held July 16-18. Forty youth and adults toured the feeder and packing industries and learned how to grade and process beef cuts. Topics also included live cattle evaluation, ultrasound and food safety. This program is conducted jointly by the meat science section in the Department of Animal Science and the Texas Beef Council.

7 BEEFMASTER More than 200 youth and adults attending the National Beefmaster Program and Show in College Station on July 25 visited the Rosenthal Meat Science and Technology Center to learn about how they as cattle producers impact the quality of the beef. They also discussed how beef value is determined in the live animal as carcasses and as boxed beef.

8 BEEF CATTLE SHORT COURSE Davey Griffin and Dan Hale participated in the general session of the 2012 Texas A&M Beef Cattle Short Course held Aug. 6-8 in College Station. They presented a virtual tour of the meat packing industry to more than 1,500 short course participants. In addition, Griffin and members of the meat judging team treated everyone to the "famous" Aggie prime rib dinner. Also, Griffin and graduate student Amanda Smith taught a breakout session on beef carcass fabrication to a group of 100.

New workshop, Kroger Boot Camp, teaches managers about beef industry

More than 100 meat market managers and district supervisor's from Kroger stores in the Dallas and Houston divisions came to College Station to learn more about the beef industry through a new program called



Kroger Boot Camp. The Department of Animal Science Extension faculty hosted the two-day program on Aug. 20-21 and 23-24 and Sept. 10-11 and 13-14, 2012. The group learned about cattle from the ranch to boxed beef. Davey Griffin and Dan Hale taught the meat science portion, including grading, fabrication and sensory attributes of beef. This program was conducted jointly by the beef cattle unit of the Department of Animal Science and the Texas Beef Council.

9 BCSC YOUTH PROGRAM The meat science section partnered with the Texas Beef Council to conduct a one-and-a-half day-long program for youth as part of the Texas A&M Beef Cattle Short Course. The youth were taught to prepare steaks for sensory evaluation, were able to follow finished steers from live animal evaluation to carcass grading and then to boxed beef, and finished the program with evaluating different kinds of beef for sensory attributes.

10 BEEF 706 Seventy cattle producers came to Texas A&M University Aug. 14-15 and Aug. 16-17 to learn about the meat production aspect of the cattle industry. The group studied live cattle from market steers through the grading and fabrication processes. They also learned about how cattle ranchers impact the quality of the meat from cattle. Beef 706 is conducted jointly by the meat science section in the Department of Animal Science and the Texas Beef Council.

BEYOND BASICS Beyond Basics is an individualized program that requires each participant to bring at least one HACCP plan. The instructors work with the participants to ensure that their program is designed correctly. Participants have stated that this is the best course they have ever taken and some repeat the course every few years to ensure their programs are still current. The department hosted Beyond Basics on May 24-25 and have another workshop scheduled for Nov. 8-9 in College Station. For more information, go to https://secure.touchnet.com/C21490_ustores/web/product_detail.jsp?PRODUCTID=2892.

INTRODUCTION TO HACCP This course is designed for individuals with little or no previous HACCP experience. A course was taught Sept. 11-12 and participants attended from large corporations to small businesses, including one new start-up company. Many attending have been in the industry for several years, but have been transferred to food safety/QA position. The Introduction to HACCP course explained regulatory requirements as well as how to develop new programs and reassess existing programs. A Dec. 4-5 Introduction to HACCP course is planned. For more information, go to https://secure.touchnet.com/C21490_ustores/web/product_detail.jsp?PRODUCTID=2892.

2012 Meat Judging Team gears-up for fall competitions

by Rachel Glascock
Meat science graduate student

The meat judging program at Texas A&M University is rich in tradition, honor and pride. Those who have been members of this elite group of individuals know the hard work, dedication and perseverance the program demands, but they also have witnessed first hand how genuinely rewarding it is to see the product of their toil.

The 2012 Texas A&M Meat Judging Team battled through a competitive spring season and are gearing up to conclude their judging career as they triumph through the highly anticipated fall contests.

The team is comprised of eight Aggies: Trey Brooks, animal science and ag business major from Llano; Kevin Doonan, animal science major from Caldwell; Preston Gates, animal science and poultry science major from Houston; Morgan Meridian, animal science major from Anderson; Lauren Thompson, animal science major from Grandview; Hope Voegele, animal science major from Waco; Lexus Weinheimer, animal science major from Stonewall; and Lance Wheeler, animal science major from Dallas.

The team is coached by Meagan Igo and, assistant, Melanie Moore, both graduate students in meat science.

After visiting with the team, there is no doubt that they are more than excited for the competition season. Weinheimer said that she is ready to see all of her team's hard work pay off. "This fall we have taken the opportunity to hone in on our strengths and correct our weaknesses. I am excited to compete."

Both coaches believe this is a very talented group of students and should not be overlooked in the forerunners seat this coming fall. "This team is very dedicated and focused. They are a close team that challenges each other to continually improve," Moore said.

Prior to the start of the fall semester, the team packed up their cooler bag and headed north to Amarillo and Plainview for a week of grading beef carcasses at the Tyson and Cargill plants, respectively. The majority of the mornings the team was up and in the cooler before the sun rose, honing in on their grading abilities and getting back in the groove after a relaxed summer.

Since August, the team has had the chance to see many more beef and pork classes and cuts, as well as numerous cuts to evaluate according to the Institutional Meat Purchasing Specifications.

Dr. Davey Griffin, coordinator of the TAMU meat judging program, said, "this team has worked very hard while at Rosen-

thal. They have taken advantage of the product available and have done their best to build upon and perfect the skill set they developed in the spring."

In regards to the fall competitive season, Igo is most excited because she can see the potential in the team and knows what they are capable of and the success they could have, even though they might not even see it themselves.



2012 Meat Judging Team: Left, Lauren Thompson, Trey Brooks, Lexus Weinheimer, Lance Wheeler, Morgan Meridian, Preston Gates, Kevin Doonan and Hope Voegele.

What makes this team so special is their competitive advantage – and that's centered around the team dynamics. "My favorite part about judging is the relationships I have formed with my teammates," Voegele said. However, what she left out is that for as close knit as they are, put them in a cooler and they are equally as competitive. Igo laughed when she said, "these judges do not settle for second place."

Igo added, "They have the heart to always do better. They always want to challenge themselves. They never give up – and that's just their mentality."

The team competed in their first contest of the fall at the Eastern National Meat Judging Contest in Wyalusing, PA on Oct. 6 and placed 5th overall, ranking 5th in beef, 3rd in lamb, 1st in pork, 5th in specifications, 4th in total and 4th in total reasons. Weinheimer placed 4th in lamb judging and 3rd in pork judging. Thompson placed 5th in pork judging and 4th in total placings.

The Department of Animal Science and the meat science section wish the 2012 TAMU Meat Judging Team the best of luck at their upcoming contests, especially the International Intercollegiate Meat Judging Contest on November 18, 2012! ■



Students serve prime rib

Left, Students Lauren Thompson, Trey Brooks, Lance Wheeler and Pilar Orozco served smoked beef tenderloin at the opening gala of the traveling exhibit "Genome: The Secret to How Life Works" on Sept. 6, 2012, at the George Bush Presidential Library and Museum. They are pictured here with Dr. Penny Riggs, associate professor in the Department of Animal Science and chair of the exhibit planning committee. The exhibit explores the nature and impact of our genes through visually-rich environments, interactive displays and family-friendly activities, now on display through July 5, 2013.

2013 Meat Judging Team learns basics



2013 Meat Judging Team: Front left, Carolina Gonzalez, Jessie Hoffman, Lindsey Turner, Katie McCarthy, Courtney Hemphill, Andrew Fry, Leslie Frenzel (coach), and Amella Tanner. Back left, J. Boyd Vaughan, Derrick McCarley, Grayson Russell, Dr. Davey Griffin (coordinator), Cameron Olson, Drew Cassens and Mallorie Phelps.

With the start of each new school year comes the formation of a new meats judging team. The 2013 Texas A&M University Meats Judging Team is learning the basics of the contest this fall from Dr. Davey Griffin, professor and meat science extension specialist, and they are honing in on these skills learned in the classroom from coach Leslie Frenzel, graduate student in meat science.

by Rachel Glascock
Meat science graduate student

Griffin said the class is progressing beyond expectations, especially when it comes to beef grading. While typically this is one of the more challenging concepts to grasp, Griffin said, "The 2013 team has picked up on grading faster than any group I have ever taught in class, and this is a promising start for a talented team."

Frenzel agrees that this is a special group of students who is sure to make the next year of her life very fun and rewarding.

"I have witnessed a group of students form a strong bond, build camaraderie, and develop personal expectations for themselves and for their teammates. This, combined with respect for themselves, their teammates and their coach, is what will motivate and drive them to win a national championship!"

As the leader of the team, Frenzel is well respected among the professors, as well as the students. Given her past coaching experience at Tarleton State University, Leslie has worked hard to learn the parts of the contests that are different from the junior division to the senior division.

Griffin said, "We (Dr. Jeff Savell and himself), felt that she could add a tremendous amount of excitement and leadership to the 2013 team, not to mention a great deal of knowledge built on years of judging experience."

Members of the team that will be attending the first road trip include: animal science majors Drew Cassens, a sophomore from Burleson; Andrew Fry, a junior from Dumas; Carolina Gonzalez, a senior from Laredo; Courtney Hemphill, a sophomore from Lohn; Jessie Hoffman, a junior from Kenedy; Kate McCarthy, a sophomore from Leander; Cameron Olson, a sophomore from Calgary, Alberta, Canada; Mallorie Phelps, a sophomore from Grandview; Grayson Russell, a sophomore from Mt. Pleasant; Amella Tanner, a sophomore from Cedar Park; Lindsey Turner, a sophomore from Georgetown; and J. Boyd Vaughan, a sophomore agricultural economics major from Runge; and Derrick McCarley, a sophomore agribusiness major from Nacogdoches. ■

MUDDA POLOOZA

benefits meat judging program



Muddapolooza, a mud volleyball tournament hosted by Slovacek Sausage in Snook, was held in May with proceeds benefiting the TAMU Meat Judging Team program. The Meat Judging Team (in blue shirts) served as tournament officials and filled in on teams where needed. Ten teams played in the tournament and were sponsored by meat companies and meat supplier companies. Meat science faculty, staff, graduate students and past, present and future judging team members played as well. Nolan Ryan Tender Aged Beef supplied beef briskets and sausage, which were cooked by the meat judging team and cut and served by Dr. Jeff Savell. Thank you to Slovacek Sausage for this tremendously fun event that will help the team travel to contests for the next year!

HOGSPASH II



The Meat Judging Team participated in Hogsplash II this August, an event hosted by Slovacek Sausage benefiting Hospice Brazos Valley.

Meat science faculty, students attend, present at summer meetings

Meat science faculty and graduate students attended several scientific meetings this summer and presented current research information. This includes the Reciprocal Meat Conference in Fargo, ND., held June 17-20, 2012; the American Society of Animal Science and American Dairy Science Association meeting in Phoenix, AZ, held July 15-19; and the 58th annual International Congress of Meat Science and Technology in Montreal held Aug. 12-17. Abstracts presented include:

Harbison, A., C. Kerth, S. Smith, and R. Miller. 2012. Improving the flavor of ground beef by selecting trimmings from specific carcass locations. Page 62 in Proc. Recip. Meat Conf., Fargo, North Dakota.

McKeith, R. O., G. D. Gray, D. S. Hale, C. R. Kerth, D. B. Griffin, J. W. Savell, K. E. Belk, D. R. Woerner, J. D. Tatum, J. L. Igo, D. L. VanOverbeke, G. G. Mafi, T. E. Lawrence, R. J. Delmore, L. M. Christensen, S. D. Shackelford, D. A. King, and T. L. Wheeler. 2012. National Beef Quality Audit – 2011: Survey of producer- and packer-related defects on the harvest floor. Page 73 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Martin, J. N., A. M. Luna, L. L. May, A. N. Haneklaus, K. B. Harris, J. L. Schutz, K. E. Belk, D. R. Woerner, L. W. Douglass, J. L. Leheska, J. M. Holden, K. Y. Patterson, M. Duvall, J. Howe, and L. D. Thompson. 2012. Development of nutrient labels for four retail cuts from the beef rib. Page 54 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Grayson, A. L., R. K. Miller, and G. E. Carstens. 2012. Loadcell effect on Warner-Bratzler shear force values of beef steaks. Pages 73-74 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Orozco-Hernandez, P., R. K. Miller, A. L. Grayson, S. M. Parke-ton, S. B. Smith, and G. E. Carstens. 2012. Relationships between beef post-harvest biochemical factors and Warner-Bratzler shear force. Page 75 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Ulbrich, C. J., K. B. Harris, T. M. Taylor, and J. W. Savell. 2012. Methods for controlling *Escherichia coli* O157:H7 and *Salmonella* surrogates during the production of non-intact beef products. Page 78 in Proc. Recip. Meat Conf., Fargo, North Dakota.

Igo, J. L., D. L. Vanoverbeke, G. G. Mafi, D. S. Hale, J. W. Savell, D. L. Pendell, D. R. Woerner, J. D. Tatum, and K. E. Belk. 2012. Driving change: The 2011 National Beef Quality Audi-



Left, Jessica Steger and Rachel Glascock were presented the Undergraduate Scholastic Achievement Award at the AMSA 65th Reciprocal Meat Conference held at North Dakota State University on June 18. Both graduated in 2012 with a bachelor's in animal science. Steger is a current graduate student at Colorado State University and Glascock is pursuing at master's degree in meat science at Texas A&M.

Page 80 in Proc. Recip. Meat Conf., Fargo, North Dakota. Martin, J. N., J. C. Brooks, L. D. Thompson, J. W. Savell, K. B. Harris, L. L. May, A. N. Haneklaus, J. L. Schutz, D. R. Woerner, K. E. Belk, T. E. Engle, J. F. Legako, A. M. Luna, L. W. Douglass, S. E. Douglass, K. Y. Patterson, J. Howe, M. Duvall, J. M. Holden, and J. L. Leheska. 2012. Updating the United States national nutrient database with nutrient data for eight cooked beef cuts. Paper 376 in Proc. Int. Congr. Meat Sci. Technol., Montréal, Canada.

Guelker, M. R., A. N. Haneklaus, J. C. Brooks, C. C. Carr, R. J. Delmore, D. B. Griffin, D. S. Hale, K. B. Harris, G. G. Hilton, D. D. Johnson, C. L. Lorenzen, R. J. Maddock, J. N. Martin, R. K. Miller, C. R. Raines, D. L. VanOverbeke, L. Vedral, B. E. Wasser, and J. W. Savell. 2012. National Beef Tenderness Survey – 2010: Shear-force values and sensory-panel ratings for U.S. retail and foodservice beef. Paper 233 in Proc. Int. Congr. Meat Sci. Technol., Montréal, Canada.

For a list of presentations made at the ASAS/ADSA meeting go to <http://animalscience.tamu.edu/2012/08/22/ansc-faculty-students-present-at-annual-animal-dairy-sciences-meeting/>. ■

Upcoming Events

Date	Event	Location	Contact
Dec. 4-5	Introductory HACCP	College Station	https://secure.touchnet.com/C21490_ustores/web/product_detail.jsp?PRODUCTID=2892
Dec. 5-7	Beef 101	College Station	Davey Griffin, (979) 845-3935 Register at http://agrilifevents@ag.tamu.edu .
Jan. 11-12	2013 Camp Brisket	College Station	http://foodwaystexas.com/events/barbecue-camps/camp-brisket/

Meat science group works with 4-H, FFA youth on Texas Pork Tour

COLLEGE STATION -- A group of 14 Texas 4-H and FFA youth participating in the 2012 Texas Pork Leadership Camp concluded their week-long tour of the Texas pork industry with a stop at Texas A&M University. The Department of Animal Science hosted the group on June 7-8.

The students were taught how to evaluate pork carcasses at Rosenthal Meat Science and Technology Center. With the help of meat science graduate students, the youth applied those techniques to pork carcasses from hogs they had evaluated live earlier in the week. Following evaluation, the students worked under the guidance of the graduate students to fabricate the carcasses and collect yield and data to compare the value differences in the hogs.

In addition, Animal Science Aggie REPS gave the group a tour of the department and campus. The youth also visited local retail grocery outlets, discussed consumer preference and participated in a mock interview on camera regarding issues relevant to the swine industry, and received feedback on methods to achieve effective communications with the media.

The Texas Pork Leadership Camp is sponsored by the Texas Pork Producers Association and is held every year. Participants receive an in-depth view of the pork industry through special tours and hands-on learning experiences, and are taught leadership skills that will enable them to become effective spokespersons for the pork industry.



Iraqi meat scientists train at A&M

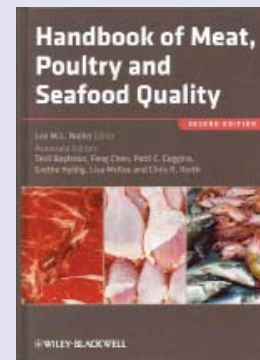
A group of meat science professors from the University of Baghdad and the University of Tikrit spent July 18-28, 2012, learning from the meat science experts in the Department of Animal Science at Texas A&M. The group participated in a training program in meat science education, lamb/beef production/value added meat fabrication and merchandising strategies through the Borlaug Institute and Texas AgriLife Research and hosted by Dr. Mike McWhorter, assistant director and international training coordinator at the Borlaug Institute for International Agriculture.

Faculty and staff participating in the training were Ray Riley, Jeff Savell, Davey Griffin, Dan Hale, Wes Osburn, Chris Kerth, Rick Machen and Jason Cleere.



News in Brief

KERTH SERVES AS ASSOCIATE EDITOR -- Chris Kerth, associate professor of meat science, served as associate editor of a textbook called, "Handbook on Meat, Poultry and Seafood Quality," for both the first and second editions, the later of which was released this summer. The textbook is described as, "This extensively revised second edition of Handbook of Meat, Poultry, and Seafood Quality focuses especially on the different quality factors affecting muscles (beef, pork, poultry, and seafood). ... This book is designed to serve as an essential reference on the quality of muscle food for all professional in government, industry, and academia."



HARRIS PRESENTS AT CHICAGO MEETING -- Kerri Harris, associate professor of meat science, presented "Top Tips for Further Processors for 2013" at the Prevention of Shiga-Toxin Producing *E. coli* (STEC) for Beef Further Processors sponsored by the North American Meat Association in Chicago on Oct. 3, 2012.

SMITH PRESENTS AT WAGYU MEETING -- Stephen Smith, professor of meat science, presented "Health Benefits and Composition of Wagyu Beef" at the national annual meeting of the American Wagyu Association held Sept. 27, 2012 in Coeur d'Alene, ID.

SAVELL, GRIFFIN TEACH HACCP IN OAKLAND -- Jeff Savell, regents professor, and Davey Griffin, associate professor and Extension meat specialist, taught Developing and Implementing HACCP for Meat and Poultry Plants for members of the North American Meat Association in Oakland, Calif., on Oct. 11-12, 2012.



Publications

Harris, K.B., and J. W. Savell. 2012. Higher learning: HACCP training evolves with the times. *Meat & Poultry* 58, Iss. 5, pp. 48 & 50-51, May 2012.

King, A.K., R.K. Miller, A. Castillo, D.B. Griffin, and M.D. Hardin. 2012. Effects of Lactic Acid and Commercial Chilling Processes on Survival of *Salmonella*, *Yersinia enterocolitica* and *Campylobacter coli* in Pork Variety Meats. *J. Food Protect.* 75(9):1529-1594.

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The 2nd annual College of Agriculture and Life Sciences Tailgate was held Sept. 29, 2012 at the AgriLife Center. In celebration of the art and science of barbecue, meat science faculty and students from the Texas Barbecue class roasted a pig and answered questions at the BBQ Genius Counter. Freshmen helping with the roast were, *left*, Jennifer Willis, Becca Kirkpatrick, Allison Burenheide, Marc Vogelsang and Thomas Alberts.