



## 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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## Texas A&M BBQ Genius Counter debuts at Texas Monthly BBQ Festival

AUSTIN -- Faculty and students from the Department of Animal Science meat science section debuted the Texas A&M BBQ Genius Counter at the Texas Monthly BBQ Festival in Austin, Texas on Oct. 30, 2011, to offer BBQ advice, answers, tips and techniques.



From left, Davey Griffin, Ph.D., Taylor Adcock, and Chloe Geye interact with one of numerous festival attendees.

Jeff Savell, meat science professor; Davey Griffin, associate professor and Extension meat specialist; and Ray Riley, manager of Rosenthal Meat Center were joined by the UGST 181 Texas Barbecue class teaching assistants and four "super sophomores" (students who have taken Texas Barbecue as freshman the previous year) and spent the day fielding questions from attendees and pitmasters alike.

With 22 of Texas Monthly's top 50 BBQ restaurants at the festival, Savell and the rest of

the BBQ Genius team also took time to talk to many of the individual pitmasters and proprietors discussing preparation, meat selection and more.

"Barbecue lovers are inquisitive by nature, and the opportunity to provide answers to their "how" and "why" questions was very rewarding," said Savell. "As a meat scientist and a barbecue enthusiast myself, this was the perfect venue to interact with thousands of folks who love Texas barbecue."

Texas Monthly also took note of the Texas A&M presence with both Dr. Griffin and "super sophomore" Taylor Adcock spending considerable time discussing briskets and BBQ with Food Critic Patricia Sharpe, even ending up in her "Festival Quotes" post on her "Eat My Words" blog. With Texas Monthly's A&M/Longhorn issue on newsstands, they even used a photo of students working the Genius Counter on Twitter.

The cadre of Aggies provided the festival a swath of maroon, but the festival provided them the perfect opportunity to share their love and knowledge of Texas BBQ. "Getting students involved in programs such as this greatly enhances the educational process and allows them to put what they learned in the classroom into practice," said Savell.



Photos by John Chivvis



**Top:** Left front, Taylor Adcock, Jenny Bohac and Chloe Geye. Back left, Jeff Savell, Davey Griffin, Ray Riley, Tyler Rosser, Carson Ulbrich and Cody Labus.



**Middle:** Graduate student Carson Ulbrich and sophomore Tyler Rosser listen to the pitmaster from Big Daddy's BBQ while Jeff Savell looks on.

**Bottom:** Sophomore Chloe Geye takes a turn answering a question about brining and smoking chickens.

## Frenzel selected as winner of Carpenter Award in meat science

COLLEGE STATION – Leslie Frenzel is the recipient of the 2011 Zerle L. Carpenter Outstanding Graduate Student Award in Meat Science.

Frenzel, from New Berlin, is seeking a doctoral degree in meat science and food safety working under the direction of Jeff Savell and Kerri Harris. She earned a bachelor's and master's degree in animal science from Tarleton State University, where she coached the 2009 National Champion Meat Judging team and managed the meat laboratory.

While at Texas A&M, Frenzel has been involved in Beef 101 and 706 programs, HACCP short courses and teaching ANSC 307 laboratories. Her true passion is teaching and she enjoys connecting with the students, industry personnel and consumer groups.

Her current research involves a validation study focusing on various intervention systems on the harvest floor. She has had the opportunity to help other

graduate research projects such as the National Beef Quality Audit and Nutrient Database Improvement Study.

This award is presented annually to a graduate student in the Department of Animal Science meat science section. The meat science section faculty, staff and students select a graduate student who demonstrates outstanding leadership skills and has contributed significantly to the section's teaching, research, and extension activities.

This award is named in honor of Dr. Zerle L. Carpenter, who began his career at Texas A&M University as an assistant professor of animal science in 1962. Dr. Carpenter rose to become full professor of animal science in 1971, head of the Department of Animal Science in 1978, and director of the Texas Agricultural Extension Service in 1982. In 1988, he was named associate vice chancellor for agriculture for the Texas A&M University System. Dr. Carpenter retired in 1997 after



providing leadership to the Extension Service for 15 years.

## TAMU Meat Judging Team ends season with high point output



**Left:** Nathan Labus, Jake Reed, Haley Kelley, Jimmie Natho, Amanda Smith, coach, Rachel Glascock, Kyle Phillips and Garrett Cline. **Right:** Jake Reed receives the Rachel Hamilton Spirit Award from coach Amanda Smith.

DAKOTA CITY – The 2011 TAMU Meat Judging Team ended this year's competition season with their highest point output of the year at the American Meat Science Association International Meat Judging Contest held Nov. 13, 2011 in Dakota City, Nebraska.

The team finished overall in fifth place with 4100 points, behind Texas Tech University, Colorado State University, Kansas State University and Oklahoma State University. The Aggies placed fourth in beef grading, fifth in overall beef and third in specifications. In individual competition, Texas A&M's Rachel

Glascock finished ninth high overall and Jake Reed finished fourth high overall in the alternates division.

Reed also was named the recipient of the Rachel Hamilton Spirit Award. This spirit award is named in memory of Rachel Hamilton who served as the coordinator of meat judging for four years until her death. The award is voted on by members of each team and considers dedication, motivation, support, encouragement and attitude.

"I am really proud of the effort given by the 2011 team and their coach Amanda Smith. They never gave up and continued



to make higher scores throughout the year," said Dr. Davey Griffin, team coordinator.

The 2011 team members include Rachel Glascock, a senior from Pilot Point; Nathan Labus, a senior from Poth; Jake Reed, a senior from Copperas Cove; Haley Kelley, a senior from Franklin; Jimmie Natho, a senior from Runge; Kyle Phillips, a senior from Vidor; and Garrett Cline, a junior from Morgan.

Amanda Smith, meat science graduate student, is the team coach.

Also this fall, the Meat Judging Team finished fourth overall at the Eastern National Meat Judging Contest on Oct. 1 in Wyalusing, Penn.; sixth overall at the American Royal Meat Judging Contest held Oct. 16 in Omaha, Neb.; and third overall at the Cargill Meat Solutions High Plains Meat Judging Contest held Oct. 30 in Plainview, Texas.

In individual competition, Labus finished eighth high at the Eastern National and Phillips placed sixth high at the CMS competition.

"Although they did not reach all of their goals, this team represented Texas A&M in a very exemplary, professional manner," Griffin said.

## TAMU Meat Judging Team Reunion brings together past, present, future members



Jeff Savell, center, with the 1977 TAMU Meat Judging Team, left, Alfred Bausch, Greg Gossett, Susan (Newman) Fritz and Ray Riley. Savell coached the 1977 team.



Russell Cross, professor and head of the Department of Animal Science, welcomes the group back to Aggieland.



Harold "Thump" Witcher '73 and member of the 1971 Meat Judging Team was presented a plaque for his contribution to the Texas A&M Foundation Meat Judging Team Fund. Kirk and Emily Jones, Reba and Kenneth McGee, Tom and Jennifer Kelley, and Dr. J. Brad and Missy Morgan were also recognized for their significant contributions to the fund.

COLLEGE STATION -- The Texas A&M University meat judging program hosted a reunion for past, present and future TAMU Meat Judging Team members and their families on Sept. 16-18, 2011 in College Station, with a weekend complete with reminiscing, judging, tailgating, football and golf.

"We welcomed team members from 1957 to the present from all over Texas, the United States and Mexico," said Dr. Davey Griffin, TAMU Meat Judging Team Coordinator. "This reunion was one of the best meat judging reunions we have ever had and it was a very successful weekend for the TAMU Meat Judging Program!"

Approximately 110 former and present members and their families gathered at events that began with a reception and smoked pork loin dinner at the G. Rollie White Visitor's Center on Friday evening. On Saturday, the Junior and Senior Meat Judging Teams held an early morning workout and were joined by former coaches Ryan Person, Jarrett Hudek and Randal Garrett, who put classes together and read team reasons. Former and future judging team members attended an open house at the Rosenthal Meat Science and Technology Center where they toured the facilities, tried their skills at placing classes, and introduced their children to the experience of meat judging. Many also visited the Kleberg Center and toured the Howard Hesby Student Atrium, the brand wall and staircase and viewed the former judging team photo gallery lining the wall of the first floor of the building.

Rachel Glascock, 2011 Meat Judging Team member, said, "It was really inspiring to have so many former meat team members back here and to know that they still have much excitement about the meat judging program - it made me proud to know they care and want to see us be successful."

A short program was held in the

Rosenthal Center and included an update on the Department of Animal Science and introduction of the Junior and Senior Meat Judging Teams. The 1991 "20-Year" TAMU Meat Judging Team members in attendance were introduced and a short summary of their



Meagan Igo, meat science graduate student and coach of the 2012 TAMU Meat Judging Team, introduces the new team.

accomplishments was given by their coach, Dr. Randal Garrett.

Plaques also were presented to those attending who made significant contributions to the Texas A&M Foundation Meat Judging Team Fund.

Lunch featuring the famous Texas Aggie Prime Rib sandwiches was served to 175 people. Saturday afternoon marked the end of a successful two-day silent auction, which was coordinated by former coaches Shanna Boleman and Jennifer Wylie with the help of Melanie Moore. Funds raised will be used for the meat judging team travel.

After lunch, participants tailgated under the TAMU Meat Judging Team Reunion tent prior to attending the TAMU versus Idaho football game.

The weekend ended with a golf tournament at Briarcrest Country Club to raise funds for the Dr. G.C. Smith Scholarship Fund. The team of Shawn Ramsey, Joe Gillespie, Darren Dylla and David Grams won the tournament, that was coordinated by Ray Riley and Shawn Ramsey. Dr. Gary Smith was on hand to support and "coach" each team as well as serve as official scorekeeper.

# Korea-U.S. Summit: Focus on future beef demand, enhancing production

by Blair Fannin  
*AgriLife Communications*

COLLEGE STATION – Producing high-quality beef and meeting future global demand was the focus of the 4th Korea-U.S. International Joint Symposium held recently at Texas A&M University in College Station.

The two-day symposium featured a number of experts from the beef industry and abroad.

“The beef industry is going to have to meet demands of a growing global population and expanding economies in the Asian markets,” said Dr. Stephen Smith, Texas AgriLife Research meat scientist and summit organizer. “This summit brought together several experts both domestically and internationally to discuss the future of breeding and production systems used to produce high-quality beef.”

The symposium was held as part of a partnership between AgriLife Research and the Rural Development Administration-Republic of Korea National Institute of Animal Science.

In 2010, the partners signed an agreement to extend a joint exchange in beef-production research, specifically examining the healthful traits of oleic acid found in Hanwoo cattle of Korea.

Presenters showed data indicating the Asian markets have high potential for more beef consumption and demand for U.S. beef.

“We can predict some economic and population growth,” said Tae-Gyu Kim, director of research and technology of Cargill’s animal nutrition business in South Korea. “Total meat consumption per capita in Asia is a lot less than U.S. or Latin America, but there is room to grow, forecasting an increase of 22 percent for beef consumption by 2015 and 44 percent by 2030.

“To meet increasing demand, we predict annual meat production growth increasing by 1.8 percent each year and annual meat consumption will grow by 3.4 percent annually. This production can’t meet demand, resulting in higher prices for animal protein.”

Kim said large urban growth in expected in China, as cities gain 182 million consumers in the next 10 years.

“There’s very large urban growth expected,” he said. “Rural China income is expected to be increasing by 8 percent every year. We have a huge number of potential consumers for high-quality beef.”

Frank Rabe, who represents JBS ex-



Dr. Stephen Smith, Texas AgriLife Research meat scientist, receives a commemorative plaque from Dr. Won-Kyong Chang, director general of the Rural Development Administration-Republic of Korea National Institute of Animal Science. (Photo by Blair Fannin)

port sales, said the company can load 39,000 pounds of chilled container beef a day at the port and ship to China.

“We are exporting more beef every year,” Rabe said. “Higher beef prices are also changing the value of beef exports. In July 2011, we added \$236 more per head as a result of higher cattle prices.”

However, Rabe said there is concern that if retail beef prices remain high for too long, it will lead to “demand erosion.” He also emphasized the importance of carcass traceability in the international market.

The summit included speakers from Korea, Japan and Brazil, as well as experts from U.S. companies such as Merck Animal Health and Elanco Animal Health, who shared the most recent industry innovations.

“This is a critical discussion for the industry,” said Dr. Mark Hussey, vice chancellor and dean for the College of Agriculture and Life Sciences at Texas A&M, during his opening remarks.

Earlier in the week, Dr. Craig Nessler, director of AgriLife Research, and Smith met with the Korean delegation to discuss the merits of the joint beef project, its accomplishments and future goals.

“The research that you are doing has

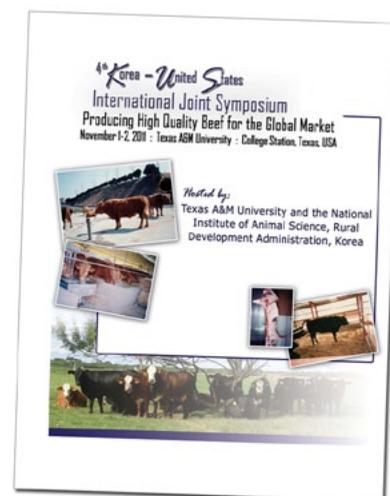
a positive impact on the beef industry in Texas and Korea,” Nessler told the group. “It’s an opportunity for both to fit individual markets. There are many opportunities for marketing and exchange of materials.”

The focus of research efforts have been producing high-quality beef and feeding of cattle. Smith said future work will focus on animal physiology and breeding traits to enhance production.

Part of Smith’s research program has specifically involved studying the effects of oleic acid in cattle production. Smith and a graduate student have found there are healthful levels of oleic acid in brisket – a cut of beef used commonly among barbecue restaurants.

“Everything that I’ve learned about oleic acid in the past few years is a result of my foreign travels,” Smith said. “More people could benefit from collaborations with other countries. The cultural aspects have supported my science.”

The symposium was developed through a mutual interest by the department of animal science at Texas A&M, AgriLife Research, and the Rural Development Administration-Republic of Korea National Institute of Animal Science.



View the proceedings from the **4th annual Korea-US International Joint Symposium** at <http://animalscience.tamu.edu/symposium/>.

## Webb, Gray receive travel fellowship to International Livestock Congress

ENGLEWOOD, CO – Department of Animal Science students Megan Webb and Gatlan Gray recently received the highly coveted International Stockmen's Educational Foundation (ISEF) Travel Fellowship to the 2012 International Livestock Congress in Denver, Colo., January 10.

Webb is a senior animal science major from Burlington, W. Va. Gray is from Brock and received a bachelor's degree in animal science in 2011. He currently is seeking a master's degree under the direction of Jeff Savell and Kerri Harris.

The travel fellowship was awarded to 12 students representing 11 universities from 7 countries, including Argentina, Australia, Brazil, Canada, China, Ethiopia, and the United States.

A multi-national selection committee selected the recipients. Fellowships include airfare, ground transportation, hotel and scheduled meals during the International Livestock Congress. Scholastic achievement, leadership experiences and professional references are all part of the stringent qualifying requirements. This setting provides each student with the opportunity to interact with world industry leaders and contribute to the solutions that will shape the advancement of the livestock industry into the future.

The mission of the ISEF is to serve as a catalyst for exchange among present and future industry thought leaders by creating opportunities surrounding international livestock industry and meat supply chain perspectives and development of educational initiatives on critical issues impacting the industry.

## Meat Science students take two-day meat processing tour around Texas

Rhonda Miller, graduate teaching assistants Amanda Harbison and Adria Greyson, and nine undergraduate and graduate students



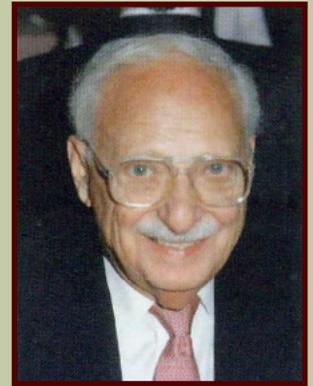
participated in a two day meat processing tour in Waco, Austin, Dallas and Fort Worth on Dec. 1 and 2. Plants and businesses visited were Cargill Meat Solutions, Texas Beef Council, Lonestar Foods, Whole Foods, Standard Meats, Rosani Foods and Texas Meat Purveyors. Students were members of either the senior level ANSC 447 Advanced Meat Science class or the graduate level FSTC/ANSC 647 Technology of Meat Processing and Distribution class.



## Rosenthal inducted into Meat Industry Hall of Fame

CHICAGO -- E.M. "Manny" Rosenthal was posthumously inducted in the 2011 Meat Industry Hall of Fame Nov. 1, 2011 in Chicago. The Hall of Fame was created in 2008 as a repository of history and a shrine to the leaders and legends whose visions, skills and dedication shaped and sustained the meat and poultry industry as the leading sector of North American food production.

As stated in the event program, "Rosenthal's service to Texas A&M was legendary. In 1987, Manny and his wife Roz donated their first endowed chair in the Department of Animal Science and the first chair in the United States designed to support research and education in meat science -- The E.M. "Manny" Rosenthal Chair. Later, the Manny and Roz Rosenthal Endowed Fund in the Department of Animal Science was established by them to further support the teaching, research and extension/outreach/service activities of the meat science educators and students at Texas A&M. The Texas A&M University Board of Regents named the E.M. "Manny" Rosenthal Meat Science & Technology Center in his honor."



## Publications

Laster, B. A., K. B. Harris, L. M. Lucia, A. Castillo, and J. W. Savell. 2012. Efficacy of trimming chilled beef during fabrication to control *Escherichia coli* O157:H7 surrogates on subsequent subprimals. *Meat Sci.* 90: 420-425.

Powell, L., K. L. Nicholson, D. Huerta-Montauti, R. K. Miller, and J. W. Savell. 2011. Constraints on establishing threshold levels for Warner-Bratzler shear-force values based on consumer sensory ratings for seven beef muscles. *Anim. Prod. Sci.* 51: 959-966.

Haneklaus, A. N., K. B. Harris, M. P. Cuervo, O. I. Ilhak, L. M. Lucia, A. Castillo, M. D. Hardin, W. N. Osburn, and J. W. Savell. 2011. Evaluation of additional cooking procedures to achieve lethality microbiological performance standards for large, intact meat products. *J. Food Protect.* 74: 1741-1745.

## News in Brief

**MILLER SPEAKS AT MEAT, POULTRY CONFERENCE** -- Rhonda Miller, professor of meat science, spoke at the Meat and Poultry Research Conference in Kansas City, Mo. on Nov. 2, 2011. She was sponsored by the National Cattlemen's Beef Association and the National Pork Board to present, "Beef and Pork Flavor: Is it important?" This conference was designed to address current research and stimulate discussion on future research needs.

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## Beef 101



COLLEGE STATION -- Beef 101 was held in College Station on Dec. 7-9, 2011 and attracted a group from 13 states and 20 different companies. Attendees appreciated the chance to learn in a hands-on atmosphere and were impressed with the knowledge and friendliness of the meat science students and graduate students working with the course.

Beef 101 is a three-day intensive hands-on program designed for anyone interested in expanding their knowledge of the total beef industry. This is the leading education program for basic information about the beef industry provided anywhere in the U.S.

## Upcoming Events 2012

Date	Event	Contact
May 15-17 June 4-6 Dec. 5-7	Beef 101 College Station	Davey Griffin, (979) 845-3935 Register at: agrilifevents@ag.tamu.edu
May 22-24	Pork 101 College Station	Davey Griffin, (979) 845-3935 Register at <a href="http://www.meat-science.org/page.aspx?id=579">http://www.meat-science.org/page.aspx?id=579</a> or call 1-800-517-AMSA.
June 8-10	Foodways Texas BBQ Summer Camp	Foodways Texas <a href="http://foodwaystexas.com">http://foodwaystexas.com</a>
June 12-14	NAMP Center of the Plate Training	<a href="http://www.namp.com/namp/Center_of_the_Plate1.asp?SnID=2">http://www.namp.com/namp/Center_of_the_Plate1.asp?SnID=2</a>

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