



NEWSLETTER

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Be sure to follow AMSA on [Twitter](#), like us on [Facebook](#) and check the [Website](#) daily to stay up to date on important AMSA information!

Got news? Send information and news items to [Deidrea Mabry](#) for inclusion in a future edition of AMSA eNews.

AMSA News

AMSA Members Featured in *Meat and Muscle Biology*

The American Meat Science Association (AMSA) this past fall launched the new AMSA journal *Meat and Muscle Biology* to be focused on edible products from commonly farmed and/or harvested meat animal species. The goal of this journal is to become the premier scientific journal for the world meat science community by offering a broad scope of peer-review manuscripts on meat and muscle biology. *Meat and Muscle Biology* is a gold open access online. Scan below to see the recent publications?

Assessment of Postmortem Aging Effects on Texas-style Barbecue Beef Briskets

McKensie K. Harris, Ray R. Riley, Ashley N. Arnold, Rhonda K. Miller, Davey B. Griffin, Kerri B. Gehring and Jeffrey W. Savell

- Palatability traits (tenderness, juiciness, flavor, and overall liking) of beef briskets (n = 48) were evaluated for 3 different postmortem aging period comparisons: 7 d vs. 21 d (Set 1), 21 d vs. 35 d (Set 2), and 7 d vs. 35 d (Set 3). Briskets were prepared as Texas-style barbecue

AMSA Membership Information:

To update your AMSA membership information please [click here](#):

AMSA's Sustaining Partners

Diamond Sustaining Partner:
Cargill

Platinum Sustaining Partner:
Smithfield Foods
Tyson Foods, Inc.

Gold Sustaining Partners:
Elanco Animal Health Food
Safety Net Services Hormel
Foods, Inc. Kemin Food
Technologies Merck
Animal Health National
Pork Board Zoetis

Silver Sustaining Partners:
ADM
ConAgra Brands
Corbion
Hawkins Food Ingredients
Group
Iowa State University Jack
Link's® Protein Snacks
Johnsonville Sausage
Company
Kraft Heinz Company
Sealed Air's Cryovac®
brand
Texas Tech University
International Center for

by seasoning with salt and pepper and smoking with oak wood over a long period (approx. 11 h) using a commercial oven designed for such purposes until deemed tender (approx. 85°C internal temperature). Within each treatment set, Warner-Bratzler shear (WBS) force measurements did not differ ($P > 0.05$) between aging days; however, WBS force measurements for point (*Mm. pectorales superficiales* composed of the *M. pectoralis transversus* and *M. pectoralis descendens*) were lower ($P < 0.05$) compared to the flat portions (*M. pectoralis profundus*) within each aging set. Consumer panelists did not ($P > 0.05$) detect differences between aging days within each set for overall liking, flavor liking, tenderness liking, and juiciness liking.

Characteristics of Ham Knuckles and Bacon Cured Using Different Brine and Meat Temperatures

Benjamin C. Peterson, Martin F. Overholt, Sean F. Holmer, Anna C. Dilger and Dustin D. Boler

- Three experiments were conducted to evaluate the effect of brine and meat temperature on the processing characteristics of pork knuckle hams and bacon. Experiment 1 used 111 pork knuckles tempered to 4°C, randomly allotted to 1 of 3 in-going brine temperatures; 1) -1°C (Cold), 2) 7.2°C (Medium), or 3) 15°C (Warm). Experiment 2 used 59 hams, randomly allotted to 1 of 3 brine temperatures similar to Experiment 1 but meat was tempered to match brine temperature resulting in treatments of: 1) Cold/Cold, 2) Medium/Medium, and 3) Warm/Warm. Experiment 3 used the same treatments as Experiment 1, but applied to bellies (N = 60). Experiments 1 and 3 were analyzed as randomized complete block designs and Experiment 2 was analyzed as a completely randomized design.

Effect of Sex and Muscle on the Fiber-Type Composition and Cross-Sectional Area of Springbok (*Antidorcas marsupialis*) Muscle

Megan K. North and Louw C. Hoffman

- This study aimed to compare the fiber-type composition and fiber cross-sectional area (CSA) of male and female springbok (*Antidorcas marsupialis*) *Longissimus thoracis et lumborum* (LTL) and *Biceps femoris* (BF) muscles. Frozen samples from 4 male and 3 female springbok were fiber-typed immunohistochemically using the primary antibodies A4.74, BA-D5 and BF-35. The CSA of the fibers was determined using the software Image J. Type IIX fibers accounted for 64 to 77% of the fibers in all samples, with type IIA (12.7 to 19.1%), type IIAX (6.4 to 9.3%) and type I (2.4 to 8.5%) making smaller ($P < 0.001$) contributions. Female springboks' muscles contained more type IIX fibers than males' ($P = 0.004$) and the BF contained more type I fibers and fewer type IIA and IIAX fibers than the LTL ($P < 0.001$).

Metabolite Profile Differences between Beef *Longissimus* and *Psoas* Muscles during Display

Anupam Abraham, Jack W. Dillwith, Gretchen G. Mafi, Deborah L. VanOverbeke and Ranjith Ramanathan

Food Industry Excellence
USDA, AMS, Livestock,
Poultry and Seed Program
US Foods

Bronze Sustaining Partners:

Certified Angus Beef
Colorado State University
Center for Meat Safety and
Quality
Darling Ingredients Inc.
ICL Food Specialties
IEH Laboratories &
Consulting Group
JBS, USA
Kayem Foods Inc.
Kerry Ingredients
Land O'Frost Inc.
Maple Leaf Foods
NSF International
Oklahoma State University
Perdue Foods
Seaboard Foods
U.S. Meat Export
Federation



To make a donation to the AMSA Educational Foundation please click below!

AMSA Educational Foundation General Fund - used in the area of greatest need

AMSA Meat Judging Fund

Mentor Recognition Funds, click here to donate today!

- *Chris Raines (supports agriculture advocacy and consumer outreach efforts for the meat and livestock industries)*
- *Tom Carr (supports AMSA youth programs including meat judging)*
- *Melvin "Hunter" Hunt (supports*

- The objective of this research was to compare metabolite profiles between beef *longissimus* and *psoas* muscles during display. Beef short loins were collected 3 d postmortem (n = 10). Steaks were cut from each *longissimus lumborum* (LL) and *psoas major* (PM) muscle and displayed under retail conditions for 7 d. Surface color, biochemical properties, and metabolites were analyzed during storage. PM decreased in redness ($P < 0.05$) by d 3 of display compared with LL. There were differences in metabolite concentrations ($P < 0.05$) between each muscle type at each time point. Sugars, amino acids, tricarboxylic acid cycle intermediates, and glycolytic substrates were detected in both muscles. Glycolytic metabolites such as pyruvic acid, glucose-6-phosphate, and fructose were greater ($P < 0.05$) in LL than PM at all display times.

Effect of Salt Inclusion Level on Commercial Bacon Processing and Slicing Yields

Jessica E. Lowell, Bailey N. Harsh, Kyle B. Wilson, Martin F. Overholt, R. J. Matulis, Anna C. Dilger and Dustin D. Boler

- The objectives were to determine effects of salt inclusion on production yields, commercial slicing yields, sensory characteristics, and lipid oxidation of bacon. A total of 144 bellies that ranged in weight from 5.8 to 6.6 kg were selected from 2 different suppliers. Fresh bellies were weighed to determine an initial weight (green weight). Then, bellies were randomly assigned to salt levels of 1.2, 1.5, or 1.8% in the final product and manufactured into bacon. Bacon was stored frozen, in aerobic packages, for approximately 0 d, 30 d, 60 d, or 90 d and analyzed for lipid oxidation. Sensory analysis was conducted approximately 14 d after slicing and again 90 d later.

Species-Specificity in Myoglobin Oxygenation and Reduction Potential Properties

Rajasekhara Nerimetla, Sadagopan Krishnan, Suman Mazumder, Smita Mohanty, Gretchen G. Mafi, Deborah L. VanOverbeke and Ranjith Ramanathan

- The objective was to compare oxygenation and reduction potential properties of bovine and porcine myoglobins in-vitro. Cyclic voltammetry and homology-based myoglobin modeling were used to determine the species-specific effects on myoglobin reduction potential and oxygenation properties at pH 5.6, 6.4, and 7.4. At all pHs, porcine myoglobin had greater ($P = 0.04$) oxygen affinity than bovine myoglobin. For both species, oxygen affinity was higher at $\text{pH } 6.4 > \text{pH } 7.4 > 5.6$ ($P = 0.0002$). Myoglobin reduction potential for both species was affected by pH ($P < 0.0001$). The redox potentials became more negative as pH increased, indicating a proton-coupled electron transfer.

Application of Food-Grade Ingredients to Nets for Dry Cured Hams to Control Mite Infestations

Xue Zhang, Yan L. Campbell, Thomas W. Phillips, Salehe

student travel to international meetings)

- *Robert G. Kauffman (support meat science student development)*
- *William Moody (supports meat science students)*
- *Robert Rust (supports meat science students)*
- *H. Russell Cross (supports meat judging and student activities)*
- *Robert Cassens (support PhD students)*
- *C. Boyd Ramsey (supports undergraduate students)*
- *Jimmy Wise (support meat judging activities)*
- *F. C. Parrish (support will endow AMSA student activities)*
- *Dell Allen (supports meat judging)*
- *John Forrest (supports AMSA programs)*
- *Dale Huffman (supports AMSA programs)*
- *Robert Bray (supports R.C. Pollock Award)*
- *Vern Cahill (supports R.C. Pollock Award)*
- *C. Ann Hollingsworth (supports student scholarships)*
- *Donald Kinsman (supports student international program)*
- *Roger Mandigo (supports RMC)*
- *Robert Merkel (supports RMC)*
- *Gary Smith (supports meat judging program)*

Abbar, Jerome Goddard and M. Wes Schilling

- Infestations of *Tyrophagus putrescentiae* (Schrank; Sarcoptiformes: Acaridae), known as the ham mite, may occur on dry cured hams during the aging process. The fumigant methyl bromide is currently used to control mite infestations, but it will eventually not be available for use since it contributes to the depletion of the ozone layer. The use of ham nets treated with xanthan gum, carrageenan, propylene glycol alginate, and propylene glycol food-grade ingredients on mite orientation to or oviposition on treated or untreated ham cubes, and mite reproduction and population growth over a 10-wk period was evaluated.

Bloom Development of the Beef *Semimembranosus* and *Triceps Brachii* as Influenced by Wet-Aging

Michelle S. Caldwell, Jason K. Apple, Janeal W. S. Yancey, Jason T. Sawyer and Jamie Hawley

- The *semimembranosus* (SM) and *triceps brachii* (TB) from USDA Select beef carcasses were used to test the effect of wet-aging period on bloom development. Inside rounds (IMPS#168) and shoulder clods (IMPS #114) were randomly allocated to 0, 7, 14, 21, 28, and 35 d wet-aging at 2°C (n = 10 subprimal cuts/aging period). Each week, two 2.54-cm-thick, non-adjacent steaks were cut from aged inside rounds and shoulder clods, and instrumental color (L*, a*, and b*) of the SM and TB was measured at 10-min intervals for 2 h after cutting. Steaks from the SM and TB became a more vivid (greater C* values; P < 0.05), redder (greater a* values; P < 0.05), and yellower (greater b* values; P < 0.05) color during the 120-min bloom period.

Benchmarking Venezuelan Quality Grades for Grass-Fed Cattle Carcasses

Argenis Rodas-González, Nelson Huerta-Leidenz and Nancy Jerez-Timaure

- The current Venezuelan beef carcass classification and grading system provide a mean for sorting carcasses into 5 quality grades, designated as AA, A, B, C, and D, in a descending order of expected eating quality. Brahman cull heifers and cows (n = 21 and 18, respectively) and entire males (bulls; n = 17) were finished on native savannah grass, slaughtered and graded by the official standards to compare carcass traits, cutability, cookery traits, and palatability characteristics between graded (A, B, or C) female classes and bulls. The B-graded bulls dressed heavier carcasses, with a more convex leg muscle profile and larger ribeye area (P < 0.05) followed by C-graded cows in carcass weight and ribeye area (P < 0.05).

Breast Meat Quality and Protein Functionality of Broilers with Different Probiotic Levels and Cyclic Heat Challenge Exposure

Hyun-Wook Kim, Traci Cramer, Osamudiamen O. E.

- *R. C. Pollock*
(supports R.C. Pollock Award)

Ogbeifun, Jin-Kyu Seo, Feifei Yan, Heng-Wei Cheng and Yuan H. Brad Kim

- This study was performed to evaluate the effect of probiotic feeding level on meat quality and protein functionality of breast muscle from chickens exposed to cyclic heat challenge. A total of 180 one-d-old male chicks were randomly allocated in 36 floor pens. From Day 15, the birds were exposed to 32°C for 10 h daily until the end of the experiment (Day 46). Three dietary treatments containing different levels of probiotic (a mixture of 4 lactic acid bacteria, 5.0×10^9 cfu/g) were prepared; regular diet without probiotic (control), regular diet with 0.5 g of probiotic/kg feed (probiotic 0.5) and regular diet with 1.0 g of probiotic/kg feed (probiotic 1).

To view the full abstracts and publications go to: <https://dl.sciencesocieties.org/publications/mmb/tocs/1/1>.

AMSA Goes to Cork, Ireland!

Thank you for participating in our recently held survey and for letting us know you're going to Cork, the 'Food Capital of Ireland' for the 63rd ICoMST!

There will be plenty to keep you engaged throughout the five days of ICoMST - from learning the latest on topics including sustainability, production, and welfare, to meat safety, processing and the effect on health. All this, while experiencing the best of Ireland from breathtaking sights like the Burren, Cliffs of Moher, and the Ring of Kerry or acquainting yourself with delectable local cuisine through the impressive social events which are in store.

Just make sure to drop by the AMSA stand to catch the latest happenings within our meat science community or simply to say "hello". Looking forward to seeing you in Cork.

Student News

Fall Meat Judging Registration

The fall meat judging season is quickly approaching. Registration is available now for all fall contests on the AMSA website. You can also find links to reserve rooms for all the hotels [here](#). Please let [Rachel Adams](#) know if you have any questions or have problems registering.

Hormel Foods National Barrow Show Meat Judging Contest Registration

Hormel Foods is excited to once again host the National Barrow Show Meat Judging Contest on September 9th at the Hormel Foods R&D facility in Austin, MN. This year's contest will feature an undergraduate and graduate division. Visit the [AMSA website](#) for more contest details and registration information.

TheMeatWeEat.com Updates

What is Certified Tender?: The Agricultural Marketing Service (AMS) of the USDA, oversees the Beef Carcass Quality Grading Program that deals with grading such as USDA Prime, Choice or Select. [Click here to read more!](#)

Is Meat and Poultry Affordable?: The U.S. meat industry provides products that are in fact both affordable and safe. The industry has worked to increase the affordability of the product. [Click here to read more!](#)

Safe Methods for Defrosting Meat: My meat is FROZEN! What is the best way to thaw it? 1. Refrigerator, 2. Cold water, 3. Microwave. Those will all work, but there are pros and cons to each. [Click here to read more!](#)

AMSA Career Center

The recently held RMC Career Fair was a great success thanks to all that participated. The event provided a venue for face to face interaction between employers and job seekers who share the common interest of how to better feed the world.



It's time to take the next step! Employers who participated at the RMC Career Fair, post your latest job listing on the AMSA Career Center website and take advantage of the Career Fair participant discounted rate. Job seekers, don't forget to post your resume on the AMSA Career Center website. Posting resume is always free.

The AMSA Career Center was created specifically to address the employment needs of professionals and employers in the meat industry. Utilize this great resource and make it work for you. Contact Jen Persons at jpersons@meatscience.org with any questions.

New Job Postings:

- Meat Scientist ~ Bellisio Foods, Inc.
- Meat Scientist ~ Ed Miniat LLC
- Lecturer - Meat & Poultry Processing ~ Clemson University
- Packaging Applications Expert NSEE ~ Sealed Air Corporation
- Meat Cutter ~ Ameristar Meats
- Sr. Product Development Manager ~ OSI Group

To post your job openings or your resume visit the [AMSA Career Center](#) today.

Industry News

National Beef Quality Audit: Setting Standards for

Quality and Consistency: For 25 years, the Beef Checkoff has funded the National Beef Quality Audit in order to better help beef producers set standards for quality and consistency of the US beef supply. While past NBQAs focused heavily on carcass traits, the 2016 audit highlighted the concerns of sustainability, food safety and animal well-being.

The key components of the 2016 NBQA included: face-to-face interviews; transportation, mobility and harvest floor assessments; cooler assessments; instrument grading evaluation and strategy sessions. During face-to-face interviews with people across all facets of the industry, food safety and guaranteed quality were among the top concerns. The harvest floor assessments concluded nearly 97% recorded a high mobility score of 1, as well as a decrease in the number of black hided cattle. Additionally, there has been a continued increase in carcass weights, with 2016 research indicating 44.1 percent of carcass weighed 900 pounds or greater. Finally, the strategy session consisted of 70 individuals from all facets of the industry, in order to review results and discuss industry standards with these results in mind.

Overall, the 2016 findings indicated a decrease in cattle with hide brands and horns, as well as an increase in the number of Prime and Choice carcasses. Moving forward, the utilization of BQA principles will continue to build consumer confidence in the beef industry and its products.

For more information, visit <http://www.bqa.org/national-beef-quality-audit/2016-national-beef-quality-audit>.

2017-2018 Foundation for Meat and Poultry Research and Education Request for Proposals: The Foundation for Meat and Poultry Research and Education (Foundation), formerly the North American Meat Institute Foundation, is a non-profit research, education and information foundation established to study ways the meat and poultry industry can produce better, safer products and operate more efficiently. The Foundation funds a broad range of food safety, worker safety, nutrition and consumer information projects.

The **Foundation invites pre-proposals** on applied and fundamental research that will improve the control of pathogens in meat and poultry products. The research priorities were developed by the Foundation's Research Advisory Committee (Committee) and represent immediate research needs for Foundation funding. The Committee is comprised of leaders in industry, academia and government who volunteer their time to serve in this critical capacity.

Research pre-proposals will be reviewed by the Committee and selected pre-proposals will be recommended for a more comprehensive proposal. With this in mind, the pre-proposals should be as clear, concise and detailed as possible.

The pre-proposal (excluding the curriculum vitae) should not exceed two (2) pages in length. Pre-proposals should include the following components:

- Investigator(s) Contact Information (including organization, address, city, state, zip, phone, fax, e-mail

- not included in page limit);
- The specific research priority addressed;
- Project Title;
- Objectives of Research Proposal;
- Description of Research Project;
- Benefit of Research to Industry;
- Approximate Cost of Research;
- Approximate Timetable of Research; and
- Brief Curriculum Vitae (including relevant publications to the proposed research).

The Foundation is requesting that only the application and curriculum vitae be submitted for review at this time. Please refer to the [grant questions and answers document](#) for more detail on pre-proposal submission. The indirect [costs policy](#) is available here.

Please submit the pre-proposals via Microsoft Word e-mail attachment to Susan Backus at sbackus@meatinstitute.org by **5 p.m. EDT on Thursday, August 31, 2017**. Pre-proposals submitted after this date and time will not be accepted. An acknowledgement receipt will be sent within one business day.

2017 Innovations in Food and Agricultural Science and Technology (I-FAST) Prize Competition: The National Institute of Food and Agriculture (NIFA) is announcing the I-FAST prize competition (the "I-FAST Competition" or the "Competition") to develop and implement the Innovations in Food and Agricultural Science and Technology (I-FAST) Program. USDA NIFA will partner with the National Science Foundation (NSF) Innovation Corps (I-Corps) to provide entrepreneurship training to USDA NIFA grantees under this I-FAST pilot program. The goals are to identify valuable product opportunities that can emerge from NIFA supported academic research. Selected USDA NIFA I-FAST project teams will have the opportunity to concurrently participate in the educational programs with NSF I-Corps awardees. Over a period of six months the USDA NIFA supported teams in the I-FAST program will learn what it will take to achieve an economic impact with their particular innovation. The final goal of the I-FAST Competition is to facilitate technology transfer of innovations that can make an impact in the marketplace and the global economy.

The USDA National Institute of Food and Agriculture (NIFA) mission is to invest in and advance agricultural research, education, and extension to solve societal challenges. As part of this mission NIFA is charged with providing grant funding for research, education, and extension that address key problems of national, regional, and multi-state importance in sustaining all components of agriculture. A majority of NIFA grant funding is provided to academic institutions to focus on developing research in the areas of farm efficiency and profitability, ranching, renewable energy, forestry (both urban and agroforestry), aquaculture, rural communities and entrepreneurship, human nutrition, food safety, biotechnology, and conventional breeding.

DATES:

- Competition Submission Period – Pre-Application Phase:

August 3, 2017 to September 8, 2017

- Evaluation and Judging – Pre-Application Evaluation and Interviews: September 11, 2017 to September 14, 2017
- Competition Submission Period – Full Application September 15, 2017 to October 6, 2017 (Only Selected Pre-Applicants are Eligible)
- Evaluation and Judging – Final Evaluation and Judging – Full Application: October 9, 2017 to October 11, 2017
- Verification of Winners: October 13, 2017
- Announcement of Winner(s): October 17, 2017

For more details, please visit the [Website](#).

Upcoming Conferences

2018 Beef Industry Safety Summit-Save the Date: 2018 Beef Industry Safety Summit will be held March 6-8, 2018 in Richardson, TX. More information to come on www.bifsc.org or www.beefresearch.org.

Animal Care and Handling Conference, October 19-20, 2017, Kansas City, MO: Registration is now open for the 2017 Animal Care and Handling Conference for the Food Industry. This is the leading animal welfare educational opportunity for meat companies, their customers and those involved in the production and management of livestock and meat products. This important conference has doubled in size since it was launched in 1999 - testament to the increasing significance of animal care and handling in the meat industry. In addition to in-depth instruction by species and "big picture" sessions that address challenges and regulatory impacts, this year's event will include a pre-conference workshop focused on the issue of livestock transportation. Don't miss this opportunity for an in-depth discussion on this critical animal handling topic. Co-Sponsoring Organizations include: American Association of Bovine Practitioners, American Association of Meat Processors, American Meat Science Association, Animal Agriculture Alliance, Canadian Meat Council, Chicago Midwest Meat Association, Consejo Mexicano de la Carne, Food Marketing Institute, National Cattlemen's Beef Association, National Dairy FARM Program, National Grocers Association, National Milk Producers Federation, National Pork Board, National Pork Producers Council, Professional Animal Auditor Certification Organization, Inc., Southeastern Meat Association, Southwest Meat Association, and USPOULTRY. [Click here](#) for registration and additional information.

Pathogen Control and Regulatory Compliance in Beef Processing, September 6-7, 2017: The premier conference addressing beef safety challenges for packers and processors of all sizes.

Top Industry, Government, and Academic Speakers

Don't miss these top speakers addressing the most important issues facing beef processors today:

- Roberta Wagner, FSIS
- Dr. Barb Masters, Keystone Foods
- Ellyn Marder, CDC
- Dr. Kerri Gehring, Texas A&M University
- Dr. Mindy Brashears, Texas Tech University
- Lone Jespersen, Cultivate
- Brenden McCullough, National Beef
- Sherri Jenkins, JBS
- Dr. Bob Delmore, Colorado State University
- Dr. David Goldman, FSIS
- Dr. Harshavardhan Thippareddi, University of Georgia
- Dr. Jeff Sindelar, University of Wisconsin-Madison

Register Today! [Click here](#) to see the full agenda and session descriptions to see why this conference is priceless for your business.

For information on exhibit and sponsorship opportunities, contact Jim Goldberg at jgoldberg@meatinstitute.org or 202-587-4206.

2017-18 AMSA Calendar of Events

September 6-7 - Beef Safety Conference - Pathogen Control and Regulatory Compliance in Beef Processing - Chicago, Illinois

September 9 - Hormel National Barrow Show Intercollegiate Meat Judging Contest - Austin, Minnesota

September 30 - Eastern National Meat Judging Contest - Wyalusing, Pennsylvania

October 15 - Elanco Animal Health American Royal Meat Judging Contest - Omaha, Nebraska

October 17-18 - National 4-H Meat Identification and Evaluation Contest, Kansas State University, Manhattan, KS

October 18-19 - 2017 Animal Care and Handling Conference - Kansas City, Missouri

October 23-25 - PORK 101 - Iowa State University - Ames, IA - **Sold Out!**

October 24-25 - Fall Advanced *Listeria monocytogenes* Intervention and Control Workshop - Kansas City, Missouri

October 29 - Cargill High Plains Meat Judging Contest - Friona, Texas

November 12 - International Intercollegiate Meat Judging Contest - Dakota City, Nebraska

January 14 - National Western Intercollegiate Meat Judging Contest - Greeley, CO

January 28 - Southwestern Intercollegiate Meat Judging Contest - Fort Worth, Texas

January 29 - AMSA PORK 101 IPPE Short Course - Atlanta, GA

February 2-4 - Tyson Beyond Fresh Meats Short Course - Tyson Foods Discovery Center - Springdale, AR

February 10 - Iowa State University Meat Evaluation Contest - Ames, IA

March 6-8 - Beef Safety Summit - Richardson, TX

June 24-27, 2018 - Kansas City, MO

Reciprocal Meat Conference 2018-2020

June 24-27, 2018 - Kansas City, MO

June 23-26, 2019 - Colorado State University - Fort Collins, Colorado

August 2-7, 2020 – RMC and ICoMST - Disney Coronado Springs Resort in Lake Buena Vista, Florida, USA

International Congress of Meat Science and Technology

August 13-18, 2017 - **Cork, Ireland**

August 12-17, 2018 - Melbourne, Australia

2019 - Germany

August 2-7, 2020 - Disney Coronado Springs Resort in Lake Buena Vista, Florida, USA (joint meeting with the Reciprocal Meat Conference)

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