

Calendar of Events

Worldwide Food Expo

When: October 26 – 29, 2005
Where: McCormick Place, Chicago, Ill.
What: Experience a global showcase where more than 100 participating countries come to see the latest machinery, products and technologies in action and remain abreast of critical topics and issues. Over 1,200 exhibitors participate in this show.
Contact: For more information, go to www.worldwidefood.com or call 703-934-4700.

Allergen Control Conference

When: December 6 – 7, 2005
Where: Crowne Plaza O'Hare in Chicago, IL
What: Learn the latest on Allergen Control for the Meat and Poultry Industry. This conference will cover the basics of food allergen issues, new regulatory developments and validation testing.
Contact: For more information, contact Marie DeLucia at 202-587-4228 or mdelucia@meatami.com

International Meat Animal Welfare Conference

When: February 22, 2006
Where: Sheraton Overland Park Overland Park, Kansas
What: The new, educational opportunity for animal scientists, veterinarians and academicians to hear about the latest research in animal handling and welfare; there will also be a poster session.
Contact: To register, contact Katie Brannan at 202-587-4223 or kbrannan@meatami.com

Animal Care and Handling Conference

When: February 23 – 24, 2006
Where: Sheraton Overland Park Overland Park, Kansas
What: A mix of trend information and ideas for implementing change and improvement at the plant level. Conference attendees will break into concurrent sessions for in-depth instruction by species. Leading academic experts in the field will offer instruction.
Contact: To register, contact Katie Brannan at 202-587-4223 or kbrannan@meatami.com

Annual Meat Conference

When: March 12 – 14, 2006
Where: Gaylord Texan Resort and Convention Center, Dallas, TX
What: Receive practical information on topics such as diet strategies, meat marketing and marketing and labeling. Participate in motivational and

interactive general sessions by industry experts designed to improve your business. Choose from store tours and popular events such as the Product Tasting Reception and the Tech Fair Luncheon.

Contact: For information, contact Marie DeLucia at 202-587-4228 or mdelucia@meatami.com

Worker Safety, Health and Human Resources Conference

When: April 9 – 11, 2006
Where: Hyatt Regency Denver at Colorado Convention Center
What: Leading experts in worker safety will provide authoritative, practical instruction. Conference also features the AMI/National Safety Council Worker Safety Awards Program dinner.
Contact: For information, contact Marie DeLucia at 202-587-4228 or mdelucia@meatami.com

2006 Innovation Showcase & Convention

When: October 4 – 5, 2006
Where: Westin Diplomat Resort, Hollywood, FL
What: The AMI Annual Convention and Innovation Showcase is your only opportunity in 2006 to gain the latest insights and perspectives on the meat and poultry industry. You will have a chance to visit with some of the most creative companies in the industry at the Innovation Showcase. This convention is the perfect place to discuss the future of the industry with those that will help to create it!

Contact: For more information, contact Laura Quartuccio at 202-587-4242 or lquartuccio@meatami.com

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AMIF Releases Co-Sponsored Risk-Based Expert Review of Foodborne Listeriosis

Great strides have been made in recent years to reduce the presence of *Listeria monocytogenes* in consumer food products, but ongoing efforts to further eliminate the pathogen are needed due to the high mortality rate, according to an expert panel convened by the International Life Sciences Institute (ILSI).

AMIF co-funded the panel that used a risk-based approach to determine strategies to reduce listeriosis. The results were published in the September 2005 issue of *Journal of Food Protection*.

ILSI researchers identified several risk factors that placed subjects at higher risk for contracting listeriosis, primarily individuals with compromised immune systems, senior citizens and pregnant women. The scientists also identified sub-population groups at elevated risk. For example, Hispanic women appear to be at a higher risk for listeriosis than Caucasian women. Finally, the panel identified that some foods bear higher risk of contamination and warrant greater attention when formulating a *Listeria* control strategy.

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Johanns Calls BSE 'Miniscule Threat' During AMIF 'Insider' Program at International Meat Science Meeting

More than 100 meat scientists attending the International Congress of Meat Science and Technology (ICoMST) in Baltimore visited the nation's capital for a day to discuss hot button issues like food safety, BSE, trade and emerging research trends during the "Washington Insider Program," sponsored by the American Meat Institute Foundation (AMIF).

Attendees of ICoMST, the annual forum for international exchange of new scientific ideas in the meat sciences, met with key insiders and policy-makers including Secretary of Agriculture Mike Johanns.

"BSE is a minuscule threat in this country" noted Secretary Johanns. Johanns told the attendees that BSE "has generated, in my opinion, far more headlines than it deserves," adding that 'the reality is this: there is no BSE 'outbreak' in the United States, and there never was.' Johanns noted that despite this, "the American cattle and beef industry lost billions of dollars in the ensuing publicity, much of which was not

accurate." Johanns assured attendees that USDA "worked hard every day to normalize commerce with all of our beef trading partners, both exporting and importing, and we see encouraging results."

He added that domestic and foreign terrorism were also factors that needed to be considered when monitoring the food supply. "Following the 9/11 terrorist attacks, our Department took immediate steps to identify and eliminate security vulnerabilities throughout the food chain ensuring the safety of meat and other products ... from the farm ... to the dinner table." He assured attendees that an overall biosecurity system was in place, "designed to prevent the harmful introduction of plant and animal pathogens in our system of agriculture and food production."

J.B. Penn, Ph.D., under secretary for farm and foreign agriculture services; Barry Carpenter, deputy administrator of the

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Science Soundbites: A review of recent research

Study Shows U.S Standards for Bacon Handling Adequately Protect Consumers

USDA's Food Safety & Inspection Service (FSIS) has established cooking guidelines for fully cooked meats but has never addressed how these "safe-harboring" guidelines apply to heat treated, but not fully cooked products, such as bacon. This topic was the subject of a recent publication by Taornina and Bartholomew (*Journal of Food Protection* 2005 68:1831) who sought to establish safe cooking time and temperature guidelines for bacon. Because the FSIS guidelines were not designed for meats that are heat treated but not fully-cooked, questions exist about the safety of a product cooked as long as 15 hours between peak smoking temperatures and 45°F.

The study, conducted by researchers at John Morrell and Co. demonstrated that *S. aureus* are controlled when smoked bacon is cooled from 120°F to 45°F within 15 hours. The full report can be found in the *Journal of Food Protection*.

Pork Consumption Shown to Increase Iron Absorption in Women

Research performed at the Center for Advanced Food Studies at the Royal Veterinary and Agricultural University in Frederiksberg, Denmark has demonstrated that adding pork to a diet can increase the absorption of non-haem iron. The study investigated over a five day period the potential increasing effect of consumption of pork meat in a whole diet on the fractional absorption of non-haem iron and the

total absorption of iron, when compared to a vegetarian diet.

Nineteen healthy female subjects completed the study and were fed three meals a day containing pork for 5 days followed by vegetarian diets for 5 days. All main meals in the meat diets contained 60 grams of pork and all meals had high phytic acid content. All main meals were extrinsically labeled with the radioactive isotope (59) Fe and absorption of iron was measured with a whole body counter. The non-haem iron absorption in the women who ate pork was significantly higher compared to the vegetarian diet. The mean fractional absorption of non-haem iron was 67 percent higher when the subjects consumed pork instead of a vegetarian diet alone. The absorption ratios of the present study were well in accordance with absorption ratios estimated using algorithms on iron bioavailability.

Link: <http://www.ncbi.nlm.nih.gov>

Sodium Nitrite Showing Promise As Significant Medical Treatment, NIH Scientists Say

Patients with a wide array of medical conditions are now receiving sodium nitrite - a key ingredient in cured meats - as part of a study and the research is yielding dramatic results, scientists at the National Institute for Health (NIH) told major media outlets recently.

Sodium nitrite's scientific promise in treating medical conditions ranging from preeclampsia to high blood pressure has been documented in a wide array of studies in recent years, putting nitrite in a new and respected scientific light.

In the latest news, NIH scientists say they have infused the anti-oxidant sodium nitrite into volunteers to assess its potential as a treatment for sickle-cell anemia, heart attacks, brain aneurysms and other conditions caused by problems with low oxygen.

"This drug would be pennies to dollars per day," said Dr. Christian Hunter of California's Loma Linda University told Associated Press. "It's so easy to use." Hunter also said he hopes to begin studies of nitrite treatment for babies with pulmonary hypertension, a very serious and sometimes fatal disease.

Earlier this year, NIH announced that nitrite was showing promise as a treatment to protect and preserve tissue and organ function after heart attacks, high risk abdominal surgery, and organ transplantation.

For more than a decade, the AMI Foundation has fought to ensure nitrite's continued availability to the meat industry.

"It's been clear to us based upon extensive reviews of nitrite's safety - including a landmark review by the National Toxicology Program in 2000 - that nitrite is very safe. But we also recognize its health benefits in preventing botulism and in reducing pathogen growth," said AMI Foundation President James H. Hodges. "This new information bolsters our belief in the public health importance of nitrite."

Antimicrobial Treatment for Hot Dogs Show Effective in Recent Publications

AMIF completed funding of a research project at Kansas State University (KSU) aimed at validating the effectiveness of a novel anti-listerial compound called cetyl pyridinium chloride (CPC) when used in ready-to-eat meat products. The research has recently yielded two peer reviewed publications that describe the results.

Researchers inoculated hot dogs and polish sausages with *Listeria monocytogenes* and then sprayed them with a one percent solution of the antimicrobial agent CPC or with a one percent CPC solution followed by a water spray wash of varying pressure. The hot dogs were then vacuum packaged and stored for 42 days at temperatures of 32 to 40 degrees F.

The study concluded that applying a spray of one percent CPC had an initial listericidal effect and prevented further growth of the pathogen. Spraying the

hot dogs with water following CPC application did not affect the results. The 1 percent CPC treatment also reduced aerobic plate counts, lactic acid bacteria, yeasts, molds, total coliforms and *E. coli* levels, further demonstrating the exciting anti-microbial properties of CPC. Lastly, and also very importantly, CPC did not affect the appearance, firmness or texture of the treated hot dogs, pointing to a strong commercial application of the treatment. Unfortunately, CPC is not yet approved for use by FSIS in RTE meat and poultry products.

Full documentation of these studies appears in the *Journal of Food Protection*, Vol. 68, No. 9, 2005, pages 1823-1830, and *Food Borne Pathogens and Disease*, Vol. 2, No. 3, 2005 pages 233-246. The researchers state that CPC could be used as a post-lethality treatment under the FSIS Interim Final Rule for *Listeria* Control.

Study Shows Sodium Caprylate Reduces *E. coli* O157:H7 in Cattle Drinking Water

In an effort to reduce the presence of *E. coli* O157:H7 in cattle drinking water, a study by Kumar Venkitanarayanan, Ph.D., at the University of Connecticut revealed that sodium caprylate is effective in killing *E. coli* O157:H7 even in water containing bovine feces.

E. coli O157:H7 is a virulent strain of bacteria that can be deadly to humans if transmitted by food or water. A significant reduction in the bacteria on the farm, through stopping its transmission in contaminated water, could greatly reduce the overall risk to the public by stopping *E. coli* O157:H7 before arrival at a meat packing plant. For this reason, this study examined the antibacterial effect of various dosages of sodium caprylate (50, 75, 100, and 120 mM) on *E. coli* O157:H7 in water in the presence and absence of 1% bovine feces or feed at 8, 10, 22, 46, 50, and 77°F.

Four strains of *E. coli* O157:H7 were used in the study. The efficacy of sodium caprylate for killing *E. coli* O157:H7 was determined in water with and without

bovine feces or feed, and appropriate quantities of sodium caprylate were added to each water sample to obtain a final concentration of 50, 75, 100 or 120 mM.

The study found that the use of 120 mM of sodium caprylate "is effective in killing *E. coli* O157:H7 even in water containing bovine feces." Significantly, the antibacterial effect of the sodium caprylate was more pronounced at higher temperatures, which is important since fecal excretion of *E. coli* O157:H7 has been reported to be higher during the summer months.

Researchers noted that this study did not attempt to measure either the economic viability or the acceptance by cattle of this compound in their water supply and suggested that further research is warranted.

A final report for this project will be posted at www.amif.org upon completion.

AMIF Announces Food Allergen Conference

The AMI Foundation, in cooperation with the Food Allergy Research and Resource Program (FARRP) and Bodendorfer-Johnson LLC, announced its first ever Allergen Control Conference for the Meat and Poultry Industry. The Conference will be held December 6 and 7, 2005 at the Crowne Plaza O'Hare in Chicago.

This conference will cover the basics of food allergen issues, new regulatory developments and validation testing. Attendees will learn the latest on:

- Protecting food-allergic consumers from allergens,
- Strategies used by others in the industry (GMPs, scheduling, procurement policies, label control, validating changeover sanitation, implementing an allergen control program),
- Addressing allergens in new product development and product reformulation,
- Developing and implementing allergen control programs,
- The Food Allergen Labeling and Consumer Protection Act (FALCPA),
- Lessons about legal considerations,
- Lessons from allergen-related recalls,
- Working better with your ingredient suppliers,
- Allergen detection methods.

Confirmed speakers include Sue Hefle, Ph.D., Associate Professor and Co-Director, Food Allergy Research and Resource Program University of Nebraska, Jennifer Johnson, Ph.D., Principal, Bodendorfer Johnson, LLC, Robert Post, Ph.D., Director, USDA/FSIS, Craig Bacon, Senior Director, Food Service, Tyson Foods, Inc., Joe Stout, Director of Sanitation, Kraft Foods North America, Jack Cappozzo, Manager of Analytic Chemistry, ConAgra Foods, Inc., and Chris Bodendorfer, Principal, Bodendorfer Johnson, LLC.

The one and a half-day workshop will cost \$595 for AMI members and \$695 for non-members. Members registering in groups of three or more will receive a further discounted rate of \$495. Conference attendees may also reserve rooms at the host Crowne Plaza Hotel for the discounted group rate of \$129 per night.



Combating *Listeria* with Risk-Based Analysis

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Researchers offered three main strategies for continued reduction in listeriosis.

1. Preventing contamination in the packaging/processing process;
2. Inhibiting growth of the bacteria once packaged and prior to consumption;
3. Science-based education for high risk groups and care-givers on safe food strategies.

The study concluded that diligent commitment by the food industry to fighting *Listeria* at multiple points in the manufacturing process, like safe and sanitary operational procedures, regular and intensive sampling procedures, careful time and temperature controls and

approved post-packing anti-microbial methods are essential to improving *Listeria* contamination rates.

The researchers recommend that high risk individuals be provided guidance on healthy eating practices, food preparation and storage, as well as specific information on high risk foods to avoid and methods to minimize their risk of *Listeria* infection. The study also concluded that everyone, even those in low-risk groups, receive information on safe food-handling practices at a young age to formulate healthy life-habits.

Full documentation of these studies appears in the *Journal of Food Protection*, Vol. 68, No.9, 2005, pages 1933-1942.

Ongoing *E. coli* O157:H7 Research Projects

Investigator	Institution	Project Title	Timeline
Alison O'Brien	Uniformed Services University of the Health Sciences	<i>E. coli</i> O157:H7 Intimin Expressed by Transgenic Plant Cells as a Candidate Oral Vaccine for Cattle	Three years
Charles Kaspar	University of Wisconsin	The Use of Egg Yolk Anti-O157:H7 Immunoglobulin to Clear <i>E. coli</i> O157:H7 from the Intestinal Tracts of Cattle	Two years
Mohammed Koohmaraie ^a	USDA-ARS - Meat Animal Research Center	Beef Carcass Surface Irradiation	Two years
John Scanga, J.N. Sofos, K.E. Belk, G.C. Smith	Colorado State University	Use of Warm (55 C) 2.5% or 5.0% Lactic Acid for: (A) Reducing Microbial Counts on Beef Subprimal Cuts and Beef Trimmings Following Fabrication, and (B) Reducing Incidence of <i>E. coli</i> O157:H7 in Combo-Bins of Beef Trimmings and Inside (in the interior) Beef Cuts Subjected to Blade/ Needle or Moisture-Enhancement Tenderization	One year
Kumar Venkitanarayanan	University of Connecticut	Inactivation of <i>Escherichia coli</i> O157:H7 in Drinking Water of Cattle by Sodium Caprylate	One year
Rowland Cobbold ¹ , Tom Besser ¹ , Dale Hancock ¹ , Janice Berg ^{2, b}	¹ Washington State University, ² Lakeside Research	Role of Super-shedders in Determining Feedlot Pen Prevalence of <i>E. coli</i> O157:H7	One year
Randall Phebus, James Marsden, Carlos Arturo Tanus	Kansas State University	Elimination of <i>Escherichia coli</i> O157:H7 and <i>Salmonella spp.</i> on Beef Trimmings Prior to Grinding Using a Controlled Phase Carbon Dioxide System: Process Validation and Quality	One year

^a This project is funded in part by America's Beef Producers

^b This project is co-funded by the National Cattlemen's Beef Association.

Ongoing *Listeria monocytogenes* Research Projects

Investigator	Institution	Project Title	Timeline
Michael Doyle	University of Georgia	Recovery, Development and Validation of Appropriate Surrogate Microorganisms in Meat and Poultry Emulsions for In-plant Critical Control Point Validation Studies	Two years
Eric Johnson and Kathleen Glass	University of Wisconsin - Madison	Intervention Strategies: Control of <i>Listeria monocytogenes</i> in Processed Meat and Poultry by Combinations of Antimicrobials	Two years
Bradley Marks, Alden Booren and Elliot Ryser	Michigan State University	Verifying and Improving the Utilization of Microbial Pathogen Computer Models for Validating Thermal Processes in the Meat Industry	Two years
Kumar Venkitanarayanan, Cameron Faustman, David Dzurec	University of Connecticut	Inactivation of <i>Listeria monocytogenes</i> on Ready-to-Eat Meat Products (Deli Turkey Breast and Frankfurter) by Monocaprylin	Two years
Peter Muriana, J. Roy Escoubas	Oklahoma State University	Pre- and Post-package Pasteurization of RTE Meats for Reduction of <i>Listeria monocytogenes</i>	18 months
Barbara Petersen, Leila Barra	Exponent, Inc.	FSIS Risk Assessment for <i>Listeria monocytogenes</i> in Deli Meats	One year
Charles Carpenter, Jeff Broadbent	Utah State University	Anti- <i>Listeria</i> Action of Levulinate	Two years
Kathleen Glass, James Claus	University of Wisconsin	Controlling <i>Listeria monocytogenes</i> on Ready-to-Eat Meat and Poultry Products using Food-Approved Antimicrobials	15 months

AMIF Addresses Better Ways to Focus Food Safety Dollars

Better ways to target and eliminate *E. coli* O157:H7 in beef was the theme of a presentation given recently by the American Meat Institute Foundation (AMIF) Vice President of Scientific Affairs Randall Huffman, Ph.D. to the Food Safety Resource Consortium's (FSRC) National Conference on Prioritizing Opportunities to Reduce Foodborne Illness.

FSRC, which includes six major U.S. universities and the non-profit organization Resources for the Future, is developing a resource prioritization model to assess the broad spectrum of food safety issues, predict which issues pose the highest risk to the human population, and target food safety resources accordingly.

Huffman explained to conference attendees that to date, resources dedicated by the beef processing

sector to reduce the occurrence of *E. coli* O157:H7 in raw beef have been focused on the post harvest processing phase where interventions are most likely to have the greatest impact. Huffman noted that although the available technologies had worked in tandem to dramatically decrease the presence of *E. coli* O157:H7, the extent of contamination on cattle had been largely underestimated. "We realized several years ago that *E. coli* O157:H7 was prevalent on a much higher percentage of cattle arriving at the processing plant than the published literature suggested in the early 1990s," he noted.

The information from these studies, combined with a strongly held belief that effective control required "a multiple hurdle systems approach encompassing the entire beef production, processing, and distribution system," led AMIF to

actively become involved in the pre-harvest food safety strategies. Because of that revelation, AMIF has been actively engaged in a highly targeted pre-harvest solutions-based research program since 1999. The theory is to eliminate as much *E. coli* O157:H7 contamination on the animal as possible prior to their arrival at the packing plant. Research has identified at least one potentially effective pre-harvest intervention, the use of direct-fed microbials. In simulated field trials, the presence of *E. coli* O157:H7 on hides was reduced by 72.7%, and the percentage of cattle shedding *E. coli* O157:H7 through feces was reduced by 62.5%.

There are also research trials underway to study vaccines against *E. coli* O157:H7. "By reducing levels of *E. coli* O157:H7 from an animal before it even gets to the

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Report: 2005 International Pork Symposium a Strong Success

The United States served as host for the 6th Annual International Safe Pork Symposium in Rohnert Park, California on September 6-9, 2005.

The four-day conference was designed to showcase new knowledge about current and emerging foodborne pathogens affecting pork worldwide and was attended by 150 scientists from 19 different nations. Over half of the participants came from countries other than the U.S. The symposium was also an important opportunity for attendees to interact with a wide range of international pork safety and policy experts and hear the latest developments from around the globe.

According to AMIF's Vice President of Scientific Affairs Randall Huffman, Ph.D., "A resounding take-away message from the conference was that the international pork industry, in cooperation with government regulatory bodies, the research community and public

health officials, have aggressively dealt with pork safety issues and provided a significant margin of global safety for the consumer." The international pork safety community continues to focus on efforts to strengthen pathogen control from farm to fork. However, the conference highlighted the important fact that pre-harvest control may not be the most cost effective way to ensure consumer safety. New research by Danish scientists is showing that post-harvest methods for controlling microbiological pathogens may match pre-harvest techniques in ensuring safety while reducing costs, thus a win-win situation for consumers.

The International Pork Symposium also focused heavily on *Salmonella* control and included sessions on *Salmonella* surveillance and status, challenges and intervention at harvest and epidemiology and methods of transmission. For more information on the symposium, call 1-800-456-pork or visit www.pork.org.

Scientific Teamwork, Non-Competitive Spirit Yield Real, Measurable Results, Boyle Says in ICoMST Keynote

Scientific teamwork in the U.S. meat industry combined with efforts to set aside competition and share information for the greater good has yielded real results, according to AMI President J. Patrick Boyle, in a keynote address to the International Congress of Meat Science and Technology in Baltimore, in August.

"Meat scientists have played a pivotal role in harnessing science and technology to produce safer, higher quality and more nutritious meat products," Boyle said. "It is essential that scientists throughout the industry maintain the team spirit and non-competitive approaches that have yielded real and measurable results."

Boyle cited progress in meat safety as a study in what is possible. In 2001, the American Meat Institute Board of Directors declared food safety a non-competitive issue. Industry scientists stepped up their collaborative efforts to solve food safety problems. They began developing best practices to tackle industry problems, ranging from how to sanitize equipment most effectively to prevent contamination to how to reduce bacteria during slaughter and fabrication. They also began to share food safety technologies that would have been considered proprietary a decade ago.

"A rising tide raises all boats," Boyle commented. "Today, we see demonstrable reductions in *E. coli* O157:H7 on beef products and *Listeria monocytogenes* on ready-to-eat meat and poultry products. And we see corresponding reductions in the illnesses associated with these bacteria." According to CDC, *E. coli* O157:H7 infections have declined 42 percent since 1996. As a result, the U.S. has reached its public health goal for 2010 six years early. Similarly, listeriosis infections have been nearly cut in half since 1996 and well within striking distance of the 2010 public health goal years ahead of schedule.

"Just as you've made products safer than ever before and contributed toward enhancing the public health, you've also made them more nutritious and higher quality," he said.

Boyle also detailed progress in other areas as a result of the non-competitive spirit. He said the red meat packing industry's efforts to enhance animal welfare are equally remarkable, and that this momentum resulted in the AMI Board of Directors vote that animal welfare should

also be a non-competitive issue. He predicted that additional research and continued information exchange will further enhance animal care and handling.

Speaking to the international audience, Boyle also stressed the importance of international adherence to global trading standards. He noted that BSE in the U.S. and Canada has been needlessly disruptive to both nations' economies with no associated food safety benefit. He said that AMI has urged USDA to take a leadership role in international harmonization and urged ICoMST attendees to support these efforts in the U.S. and in their own nations.

"I urge you to continue to leverage your collective scientific abilities for the good of the industry and of the ultimate consumer," Boyle said.

"There's no doubt we have our critics on numerous fronts. Let their criticism not frustrate you. Let it increase your resolve to do what was once thought impossible. I'm confident that your ingenuity will only continue to increase with sustained cooperation among our best and brightest," he concluded.

Food Safety Dollars at National Conference *from Page 5*

packing plant, we may one day be able to eliminate the bacterial contaminant from the beef supply altogether, through the use of multiple hurdle strategies," said Huffman. In summary, Huffman said that promising pre-harvest technologies including neomycin, sodium chlorate, vaccines and competitive exclusion products are currently caught in the regulatory process.

"Food safety is of the utmost importance to the meat industry, and government agencies charged with approving new technologies need to act rapidly to approve new methods for pathogen control," Huffman noted.

Huffman urged the conference attendees to consider the importance of the entire production chain when developing resource allocation models, and avoid the trap of focusing on only one commodity, or on only one segment of the industry. "The efforts of FSRC to develop a framework for targeting limited food safety resources to the highest risk food is a worthwhile goal," he said.

AMIF Hosts "Washington Insider Program" for ICoMST

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Agricultural Marketing Service; and Richard Raymond, M.D., USDA's under secretary of food safety, also addressed the attendees regarding their specific areas of expertise and insight.

Dr. Merle Pierson, deputy under secretary for research, education and economics, told conferees that environmentally-friendly agricultural practices, technologies leading to value-added products, and competitive products for global markets are among the objectives promoted by his department. Pierson detailed how the department's Meat Animal Research Center (MARC) in Clay Center, Nebraska, was dedicated to enhancing the quality and safety of meat products through the study of molecular genetics, biological engineering and nutrition.

Some of the research at MARC was key in enhancing food safety for the entire country, a top priority for USDA. Pierson noted how research conducted at MARC had shown a "positive relationship between live animal infection and meat contamination," as well as demonstrated seasonal and regional variations in *E. coli* O157:H7, and documented how the hide was a major contributor to contamination of beef.

Addressing the conferees on the current political dynamics in the Senate was Steven Meeks, majority staff legislative director for the Committee on Agriculture, Nutrition and Forestry. Meeks discussed the committee's work with BSE, and their actions to help restore lost trade opportunities caused after the discovery of the initial case of BSE in the U.S. in December 2003. Meeks recognized Under Secretary Penn his for success in the quick restoration of trade with Mexico - the U.S.'s third largest trading partner in beef - which resumed trade after only a few months of disruption.

Meeks also discussed various animal diseases being addressed by the committee, including foot and mouth disease, avian influenza, and bovine spongiform encephalopathy. Meeks explained that the Senate committee was proud of the food safety advances made by the USDA, and it was committed to ensure the continuation of progress. He also discussed the upcoming farm bill, and some challenges and opportunities that it would present to the industry.

AMIF's President Jim Hodges wrapped up the day, reminding attendees that science must be the bedrock on which all laws and regulations in this industry are based. "In Washington, perception has a way of becoming reality," he noted. "And if the laws and regulations governing our industry are not based on firm science and verifiable data, then we're all standing on quicksand."

Hodges added that recent barriers to the resumption of trade in beef following the first diagnosed case of BSE in the U.S. was a result of key trading partners allowing their public policy to be dictated by emotional reaction and not sound science. "We can't go down the path of having precautionary programs and policies that can't be justified by data or science," he noted. "Without mutual respect for the scientific underpinnings of public policy, the goal of trade harmonization will be nearly impossible to achieve," he added.

2005 Meat Industry Research Conference Focuses On Allergens, Food Defense and Culinary Arts

The 2005 Meat Industry Research Conference (MIRC) will focus on allergens, food defense and culinary arts October 25-26, at Chicago's McCormick Place. The MIRC will be held in conjunction with the AMI International Meat, Poultry & Seafood Industry Conference and Exposition, October 26-29, 2005, and is cosponsored by the American Meat Science Association.

The MIRC is targeted at those responsible for food safety, product development, regulatory compliance and research and development. The conference is free to registered AMI Expo attendees, which translates into a \$665 value.

MIRC is co-sponsored by the American Meat Institute Foundation and the American Meat Science Association. For more information, contact AMI's Director of Education and Professional Development, Marie DeLucia at mdelucia@meatami.com. To register, go to <http://www.worldwidefood.com/register>.

Wal-Mart, McDonald's and FBI Counterterrorism Expert to Headline AMI Foundation 2006 Animal Care and Handling Conference

Representatives of Wal-Mart, McDonald's and the Federal Bureau of Investigation Counterterrorism Division will headline the AMI Foundation Animal Care and Handling Conference for the Food Industry, February 23-24, 2006, at the Sheraton Overland Park in Overland Park, KS, just outside Kansas City.

The conference will again offer an opening general session followed by three tracks: Management and Policy, Applied Pig Handling and Applied Cattle Handling.

This year's conference boasts 11 cosponsoring organizations: The American Association of Bovine Practitioners; American Association of Swine Veterinarians; Animal Agriculture Alliance; Food Marketing Institute; National Cattlemen's Beef Association; National Grocers Association; National Milk Producers Federation; National Pork Board; National Pork Producers Council; National Council of Chain Restaurants; and the National Restaurant Association.

Joan Menke-Schaenzer, vice president of food safety and security at Wal-Mart, and Bob Langert, director of social responsibility at McDonald's, will deliver a keynote address and discussion about consumer's expectations for animal welfare. The discussion will be moderated by Charlie Arnot, president of CMA Consulting.

Also during the conference's opening general session, John

Lewis, director of the FBI's counterterrorism division, will deliver a provocative talk on animal extremism and the challenges faced in the United States.

Many of the conference's highly rated faculty will return again to instruct in the various tracks. They include Temple Grandin, Ph.D., of Colorado State University; John McGlone, Ph.D., of Texas Tech University (invited); Robert "Bo" Manly, president and COO, Premium Standard Farms, Inc.; Mike Siemens, Ph.D., of Smithfield Foods; Collette Schultz-Kaster of Premium Standard Farms, Inc.; Angela Baysinger, Ph.D., of Farmland Foods; Kellye Pfalzgraf, DVM, of Tyson Foods; and Jerry Karczewski of Cargill Meat Solutions.

Attendees in the Management and Policy Track will benefit from sessions on auditing, leading culture changes, security, managing controversy and USDA humane slaughter initiatives.

Attendees in the Applied Pig Handling Track will enjoy a special, in-depth session on CO₂ stunning, a look at practical ways to improve handling, a discussion of pig transport issues and a look at AMIF's *Animal Handling Guidelines and Audit Guide*.

The Applied Cattle Handling Track features a look at religious slaughter and how to troubleshoot problems in Kosher and Halal operations; cattle transport, handling and

stunning and the relationship between cattle handling and beef quality.

New this year are special "Welfare Tech" sessions, where equipment suppliers can present data and information about their products and how they have been documented to enhance animal handling and stunning. To request a Welfare Tech application, contact AMIF's Ginger Bray at gbray@meatami.com or 202/587-4200.

In addition, exhibitors may showcase their products and services during a special Welcome Reception on February 23. To reserve an exhibit space, contact Katie Brannan at kbrannan@meatami.com or 202/587-4200.

Fees for those registering before December 31, 2005, are \$325 for AMI members, \$450 for non-members and \$295 when three or more members register together. After December 31, registrations rates increase to \$425 for members and \$395 for when three or more members register together.

For a complete agenda or to register, go to www.animalhandling.org.