

Swine HEALTH REPORT

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Fall/Winter 2007

WANTED: National Surveillance Systems

A meeting of the joint U.S. Animal Health Association (USAHA) and American Association of Veterinary Laboratory Diagnosticians (AAVLD) Committee on Animal Health Information Systems at the associations' annual meeting, Reno, on Oct. 23 resulted in a key action: the group wants comprehensive and integrated surveillance systems developed at the national level to progress rapidly. The committee also called for the development of a "national reportable animal disease list."

The Committee on Transmissible Diseases of Swine supports a comprehensive and integrated surveillance system. At its meeting in Reno, the committee requested that the comprehensive, integrated surveillance system is a "high priority." The committee also asked the U.S. Department of Agriculture (USDA) to provide the funding and human resources necessary to the National

Surveillance Unit to complete the planning process for integrated and comprehensive surveillance for the commercial swine compartment by June 30, 2008."

Having a comprehensive, integrated National Animal Health Surveillance System (NAHSS) would address—and ultimately answer—multiple questions. Some of these questions include:

- 1) Can the USDA rapidly find disease throughout the nation, wherever it may arise?
- 2) Can the United States make statements about its national disease status that will convince trading partners and consumers that American agricultural products are safe and disease free?
- 3) Can national policy decisions be based on actual surveillance data so that



tax dollars can be spent wisely?

The group agreed that a comprehensive national surveillance system should focus on diseases of significant economic or health impact, such as foot-and-mouth disease, and on emerging diseases and issues. Another point of agreement was that the information system infrastructure

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30-Day Health Rule Change Proposed

The United States Animal Health Association's (USAHA) Transmissible Diseases of Swine committee passed a resolution to address issues with the U.S. Department of Agriculture's (USDA) interpretation of the 30-day health rule.

The resolution seeks changes in the wording of accreditation regulations addressing the issue of animal inspections prior to shipment outside of a recognized production system. USDA has interpreted the language in 9CFR161.3(a)(2) to require an accredited veterinarian to inspect animals born since the last 30-day herd visits before issuing a Certificate of Veterinary Inspection (CVI) for interstate movement outside of a production system.

The American Association of Swine Veterinarians (AASV) sponsored a resolution before the committee recommending the wording be changed to this: "Following the third and subsequent inspections of a herd or flock in a regular health maintenance program, an accredited veterinarian shall not issue a certificate, form, record or report which reflects the results of any inspection, test, vaccination or

treatment performed by him or her with respect to any animal residing in the herd or flock at the time of the last inspection or born into the herd or flock since the last inspection in that program, unless he or she has personally inspected that herd or flock within 30 days prior to issuance."

"This language would allow veterinarians to issue a CVI for animals born since the previous 30-day herd health visit required as part of a recognized herd health plan without having to revisit the herd to individually inspect the newly born animals," states Dr. Harry Snelson, AASV communications director.

Their resolution has been forwarded to USDA which has up to a year to respond. If USDA agrees to propose the suggested language change, it could take up to another year to have the wording changed and codified.

"AASV will continue to work closely with USDA to achieve a workable solution to alleviate the risk of veterinarians potentially losing their accreditation for failure to adhere to this regulation," Dr. Snelson added.

WANTED*(cont'd from page 1)*

be built to support a comprehensive and integrated surveillance system. This will allow efficiency by leveraging efforts and activities across diseases, species, field activities, laboratory specimens, database development and even standardized analytic and reporting methods.

Dr. Bruce Akey, director of the Cornell University Veterinary Diagnostic Laboratory, and co-chair of the joint committee, stresses that the "old" way of surveillance has shown great success in eradicating diseases. He mentioned a sample collector's approach to surveillance is "stove piped" to one sample, one test, one disease, one location, etc. Information gained represents a fraction of American industry but cannot provide confidence to consumers and trading partners about the disease status for the United States as a whole. He adds that the "new way" of surveillance is more applicable in today's world for diseases that are rare but of great concern.

"In a new and comprehensive surveillance system, one sample could serve multiple purposes," Dr. Akey states. "It will be tested for several diseases, both

species specific and cross species.

"Test results will be electronically transmitted through the National Animal Health Laboratory Network (NAHLN) backbone. This information will be fed upward to a centralized data base and is to be available for use at the state and local level."

Dr. Aaron Scott, Centers for Epidemiology and Animal Health (CEAH), National Surveillance Unit (NSU), Fort Collins, Colo., emphasized that surveillance is not the business of collecting samples; it is the business of collecting information.

"A comprehensive and integrated national surveillance must be designed to find samples that have the most information value. If the characteristics of the disease permit a sample from one animal or farm to provide that information for two diseases, then we have gained efficiency," Dr. Scott explains. "This kind of surveillance system, however, is far more encompassing than simply doing two tests on one sample."


Dr. Scott offered several examples for a comprehensive, integrated approach. Field operations might use common infrastructure for multiple diseases, such as staff, trucks, copy machines to sample

sources. In addition, with the "new way," laboratories might use standardized data systems for reporting results. Database designers might use modules that are based on a common template rather than starting fresh for each disease. Data entry systems might be integrated so that field personnel can enter multiple sets of data through a common portal at the sight of the sample collection."

"The system is comprehensive when it provides information about all of the population and multiple diseases and is representative of all the nation," he adds.

Dr. Scott points out that the 21st Century has seen increased mobility of people and movements of animals. As such, he says there will be growing need to demonstrate to the American consumers and foreign trading partners that the U.S. food and livestock industries are safe and disease free.

"To grain and maintain this confidence, we must be able to make statements about disease status in our nation and industries as a whole, and we must leverage the limited funds in the most efficient manner possible. That is what comprehensive integrated national surveillance is all about," he summarizes.



**NATIONAL
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**Swine
Health Report
Fall/Winter 2007**

Swine Health Report provides the latest information on issues pertinent to swine health initiatives, strategies, research and regulatory action. It is a communications initiative of the NIAA Swine Health Committee and is produced in cooperation with USDA-APHIS. Reprinting is encouraged.

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Vital Clue Found in the Fight Against PRRSV

A research team comprised of Agricultural Research Service (ARS) scientists and University of Nebraska-Lincoln scientists have discovered a vital clue for battling porcine reproductive and respiratory syndrome virus (PRRSV). The clue: swine genetics.

The research team comprised of Joan Lunney, Patricia Boyd and Daniel Kuhar with the ARS Animal Parasitic Diseases Laboratory in Beltsville, Md. and animal scientist Rodger Johnson and graduate student Derek Petry from the University of Nebraska-Lincoln recently evaluated two lines of swine for genetic resistance to PRRSV. The Nebraska Index line was involved in the research project because of its improved reproductive traits, and the Hampshire X Duroc cross was selected for its high growth rates.

During the project, all pigs in both groups were exposed to PRRSV, and all pigs in both groups became infected. But all pigs did not respond the same to the disease.

The Nebraska Index line generally recovered more quickly, maintained higher levels of weight gain during their illness

and had lower body temperatures.

Samples of blood, lung and bronchial lymph node tissue showed that virus levels cleared more quickly in PRRSV-resistant pigs in both groups.

The scientists then looked at the tissue expression of 11 genes and one "house-keeping" gene involved in the immune response to PRRSV. Both the Nebraska Index line pigs and the Hampshire X Duroc cross pigs showed significant activity in 11 of the 12 genes, but the type of activity differed between the two groups.

High pre-infection blood levels of one protein—interleukin-8 (IL8)—was found to be significantly associated with PRRSV-resistant pigs. Low levels of another protein—interferon-gamma (IFNG)—in blood and in RNA samples was also correlated with PRRSV resistance.

"These findings support existing research that indicates animal breeds with high growth rates devote less energy to immune and disease traits," states ARS research team member Joan Lunney. "This information will facilitate work into developing genetic tools for increasing swine resistance to PRRSV."

Market Swine Surveillance High on Industry List

The swine industry is all for a more integrated and comprehensive national surveillance program. Animal health and pork industry leaders at the United States Animal Health Association (USAHA) annual meeting passed a resolution urging the United States Department of Agriculture, Animal and Plant Health Inspection Services, Veterinary Services (USDA/APHIS/VS) to maintain funding for market swine surveillance in FY 08 and FY 09 and to increase funding in future years to expand and integrate market swine surveillance into the swine industry's comprehensive surveillance program.

"Market swine surveillance has been recognized as a key component of the industry's move to an integrated and comprehensive swine disease surveillance program for the commercial compartment," stated Dr. Patrick Webb, Director of Swine Health Programs, Science & Technology, National Pork Board. "Market swine surveillance provides access to samples using methods that are more economically feasible and less burdensome to the industry."

To utilize this surveillance stream more effectively, Dr. Webb says the swine industry has taken significant steps to expand surveillance objectives and to enhance traceability. The swine industry also wants to take advantage of research opportunities to make market swine surveillance more cost-effective and valuable to the industry.

Background

Fourteen of the top 35 U.S. swine

slaughter plants currently collect samples as a part of the market swine surveillance program. These samples, Dr. Webb says, provide access to 50 percent of the U.S. market swine population—approximately 200,000 head out of the 405,000 head harvested daily.

In late 2007, the swine industry prioritized and communicated national surveillance programming objectives to the National Surveillance Unit (NSU). Starting with a list of 30 diseases, swine industry leaders narrowed the list based on a number of factors including economic impact. The final prioritized list includes classical swine fever, foot-and-mouth disease, pseudorabies, erysipelas, swine brucellosis, trichina and toxoplasmosis.

Currently the industry has validated tests for detecting pseudorabies, toxoplasmosis and trichina at harvest. Antibody and antigen tests for detecting classical swine fever are in the process of being validated by the National Animal Health Laboratory Network (NAHLN).

Dr. Webb notes that program standards for the National Animal Identification System (NAIS) for swine support risk-based surveillance.

"As part of the NAIS swine identification program standards, producers will begin to include the Premises Identification Number (PIN) of the sending premises on the bill of lading must be reported and recorded for all market swine arriving at the first point of concentration in the harvest chain," Dr. Webb tells. "As the industry moves forward on implementation of the program standards, producers will be able to purchase their normal sow production

tags that will also function as official NAIS tags. These tags will bear the source premises identification number or official animal identification number (AIN) and will be used in market breeding swine moving to the first point of concentration."

"These two requirements are being implemented by the swine industry as part of the Swine ID Plan under the NAIS and will support risk-based surveillance and statistically significant sampling from both swine populations."

Research Opportunities

Market swine surveillance has been beneficial to the industry as it has been used as a part of a two-phase pilot study to determine the prevalence and distribution of porcine reproductive and respiratory syndrome (PRRS) in high-risk swine populations in hog-dense areas.

"PRRS is estimated to cost the pork industry \$540 million to \$700 million per year, and the results from these studies will be important to the industry as it moves forward with strategies to mitigate the economic effects of this disease," Dr. Webb states.

Dr. Webb adds that market swine surveillance could also be beneficial in determining prevalence and distribution of other important diseases to the industry, including *Actinobacillus pleuropneumoniae*, *Actinobacillus suis* and *Mycoplasma hyopneumoniae*, in a rapid, cost-effective manner.

"This information on these diseases will assist with decisions on how to deal with these diseases as an industry," Dr. Webb summarized. ●

ID•INFO EXPO Survey

Animal Disease Control 'Biggest Need,' U.S. Lagging Behind Other Countries

More than 85 percent of those completing an informal survey at ID•INFO EXPO 2007 believe the United States is not keeping pace with other developed countries regarding animal traceability systems for marketing and disease control purposes. Not all respondents agreed with this assessment as 8 percent of respondents ranked the United States as proceeding "about the same" pace as other developed countries and 1.61 percent of respondents who ranked the United States as "exceeding other countries." Close to 5 percent of attendees offered "no opinion."

The survey, taken on the first day of the conference, was answered by a conference

audience comprised of approximately one-third corporate individuals involved in the animal identification business, one-third state and federal government employees and one-third producers.

Animal disease control topped the list when respondents ranked "the biggest needs for implementing animal traceability systems." Ranking needs from 1 (most important) to 5 (least important), survey respondents put animal disease control first on the "biggest needs" list with an average rank of 1.57. The second biggest need for implementing animal traceability systems, according to this audience, was export of livestock products, with a 2.80 average rank. Value-

added livestock marketing was next, with a 3.06 average rank; food safety programs, 3.41 average rank; and country of origin labeling, 4.09 average rank. Under the "other" needs category appeared "mandatory," "decreased costs of production," "a secure data collection system" and "expansion of the 'Locate in 48' program."

When posed the question "What level of participation do you feel is necessary for the premises registration under the National Animal Identification System (NAIS) to become an effective tool in supporting animal disease traceability?", nine out of 10

NAIS Business Plan Under Development Lists 7 Strategies

During the general session of the National Institute for Animal Agriculture's (NIAA) ID•INFO EXPO in Kansas City, Mo., in August, Dr. John Clifford, Deputy Administrator, USDA/APHIS/Veterinary Services, publicly announced a business plan for advancing animal disease traceability.

This business plan supplements the National Animal Identification System (NAIS) Draft User Guide which was issued in 2006 and is being updated and re-published in December 2007.

The NAIS Business Plan was also explained at the October joint annual meetings of the U.S. Animal Health Association (USAHA) and the American Association of Veterinary Laboratory Diagnosticians (AAVLD).

"We are excited about the future of NAIS," stated Neil Hammerschmidt, one of three NAIS program coordinators. "We've come a long way. . . we are headed in the right direction."

As of Oct. 30, 2007, premises registration had totaled 422,852.

"While premises registration continues to be a priority, premises registration alone will not get the job done," Hammerschmidt emphasized. "Animal identification is progressing as well."

Hammerschmidt emphasized that the NAIS business plan is being designed to obtain the greatest return on investment while advancing traceability. The approach taken also focuses on establishing action relevant for each species.

Plan Includes 7 Strategies

The NAIS business plan to advance traceability is comprised of seven strategies:

Strategy 1: Prioritize species/sectors.

Strategy 2: Harmonize animal identification systems.

Strategy 3: Standardize data elements of disease programs to ensure compatibility.

Strategy 4: Integrate automated data capture technologies with disease programs.

Strategy 5: Partners with states.

Strategy 6: Collaborate with industry.

Strategy 7: Advance identification technologies.

Strategy 1

To maximize the effectiveness of resources, NAIS program coordinator Dr. John Wiemers explained that species have been prioritized into two tiers. Tier 1 encompasses primary food animals—cattle, swine, poultry, sheep, goats, deer and elk—and equine. Horses are listed as a priority due in part to frequent animal movement. Tier 2 covers all other livestock.

Each tier is then broken into three categories: high priority, medium priority and low priority.

Within Tier 1, bovine is a high priority, ovine is a low priority and all other livestock are a medium priority. Dr. Wiemers noted that sheep are ranked as a low priority "not because they aren't important."

"It just means that that ship is sailing straight with a full sail. They have a good hand on the rudder. The resources are there to make that sector very capable of traceability," Dr. Wiemers told those attending ID•INFO EXPO. In the end, the sheep industry will require less resources and is therefore ranked as a lower priority.

Strategy 2

"The harmonization of animal identification systems will result in more



Neil Hammerschmidt gives an overview of the NAIS business plan.

cost-effective options benefiting producers while achieving increased animal disease traceability for the entire industry," Dr. Wiemers stated.

Domestic programs that fall under the "harmonization" strategy include breed association and per-

formance recording, Agricultural Marketing Services (AMS), Quality Systems Assessments and industry alliances.

"Standardization of animal identification within our trade partners is imperative," Dr. Wiemers said.

Strategy 3

Dr. Wiemers specified the integration of NAIS with disease programs as "one of our immediate priorities." National standards will be set, and definitions will be given in regulatory form.

The sole version of animal identification number recognized will be 840. A transition or sunset date will aid moving to this Animal Identification Number (AIN).

"Additionally, the seven character Premises Identification Number (PIN) will be recognized as the sole official format for the premises identification number,"

Dr. Wiemers shared. "Other formats can be used for other purposes, but, for official disease control programs for state movement of livestock, the seven-character PIN will be the official format."



Dr. John Wiemers discusses Strategies 1-4.

Strategy 4

"Several of the existing disease control programs have begun to incorporate various data capture technologies. Further integration of these technologies will provide great benefit to our traceability," Dr. Wiemers stated.

Strategy 5

During ID•INFO EXPO, National Animal Identification System (NAIS) program coordinator Dr. Dave Morris said that the NAIS business plan recognizes the need for states to address local disease priorities as well as the need to focus on species industries in their most prominent areas of needs.

"USDA will continue to support state, tribe and territory cooperative agreements," Dr. Morris elaborated. States will be responsible for identifying traceability risks and identify how such risks will be addressed.

Strategy 6

Dr. Morris listed several collaborative efforts in place with industry partners. Groups cited by Dr. Morris included but were not limited to National Pork Board, American Angus

Association, National Milk Producers Federation, and National Future Farmers. USDA is also planning to work cooperatively with accredited veterinarians, Brand State Working Group, packers and renderers. Veterinarians were acknowledged as being first responders to outbreaks.

"These are important to us because these producers receive information directly from these organizations and can assist our efforts greatly," Dr. Morris stated. Work includes outreach efforts and identification of premises.

Additional partnerships efforts that are a USDA priority include those with feedlots, livestock markets, industry alliances and harvesting facilities.

Strategy 7

The advancement of identification technologies strategy addresses both today's technologies and emerging technologies. Performance standards will be pinpointed, with advancing technologies evaluated. The goal is to have accurate, timely information.

Summary

In closing remarks to ID•INFO EXPO participants in Kansas City, Dr. Morris stated, "We will continue to advance traceability through industry-state-federal partnerships."

The NAIS business plan for advancing animal disease traceability is in draft stage, with the USDA seeking input from targeted groups. NAIS staff liaisons conducted conference call discussions with the species working groups and the subcommittee in early November. Similar teleconferences were hosted by USDA with industry organizations, state animal health officials, areas veterinarians in charge and staff members working on animal ID issues.

"While not all comments may be addressed in the published draft, we intend to read and review each of them before publication," Dr. Clifford stated. "The USDA appreciates past contributions to the development and implementation of NAIS and will continue to work with industry to make the program a success." ●



Dr. David Morris shares information regarding Strategies 5-7 and provides the summary.

The NAIS coordinators stressed that the business plan and concepts and strategies focus on the areas with the greatest returns on investment, and will utilize a critical mass approach.

"We look at critical mass as best estimate of participation level needed to advance and achieve a more functional traceability system," Dr. Morris stated.

"We anticipate that critical mass will predictably vary by species."

Until more information is available, 70 percent level of participation is the level set. That level will be exceeded by some species. Dr. Morris noted that commercial poultry has about 95 percent participation while swine is close to being 100 percent. Sheep and goats are at 75 percent traceability and should advance to 90 percent.

Dr. Morris cited the cattle industry as having "the longest journey" among the species. A bookend approach will be taken, with the goal of reaching the 70 percent level, focusing on termination records reported at harvest.

New Swine Disease in China Requires Protective Steps

The challenge is on to protect U.S. swine from the deadly, puzzling swine disease that has struck China, causing a death toll calculated as somewhere between 90,000 and 100 million pigs. This number is disputed by the Chinese government which estimates that 68,000 pigs died from blue ear disease, 175,000 were slaughtered and an additional 1.5 million were vaccinated in the first eight months of this year.

Dr. Paul Sundberg, vice president of science and technology for the National Pork Board, stressed the importance of U.S. port security for the new Chinese threat—as well as for all foreign animal diseases.

The mystery disease, being called "blue ear disease," reportedly causes abortions in breeding sows and respiratory death, swollen joints and sometimes central nervous system symptoms in nursery pigs. It is unclear which pathogen or combination of pathogens is causing the fatal disease in China. Reports, however, suggest

that a strain of Porcine Reproductive and Respiratory Syndrome (PRRS) virus is involved and may be complicated by association with *Streptococcus* or *Haemophilus* bacteria.

Chinese authorities released 12 complete genomes of PRRS virus strains believed to be involved, along with several partial genomic samples that scientists call "open reading frames" associated with the disease, to the public international database GenBank. When the 12 complete genome sequences were compared to the PRRS database, none of the Chinese isolates were a precise match to anything in the U.S. database.

Although one similarity was found on one of the Chinese PRRS strains when compared to a U.S. strain known as "Minnesota 184," an entire section was missing on the Chinese genome. Dr. Pam Zaabel, director of swine health information and research, National Pork Board, compares the relationship between the two genomic sequences as "second

cousins, twice removed."

The U.N. Food & Agriculture Organization (FAO) conducted field studies of the disease in Vietnam with the cooperation of the country's government and sent samples for laboratory analysis. The results could become available in early December.

Could blue ear disease and H5N1 be linked since various reports indicate that the so-called blue ear disease may have begun in the same Chinese province that had outbreaks of high-pathogenic avian influenza? Dr. Sundberg and Dr. Zaabel are on the same page, stating that, given the symptoms, they do not believe that the H5N1 virus is involved in the new disease.

Although Chinese authorities employed mandatory vaccination using a newly developed killed PRRS vaccine developed in China, Dr. Sundberg is not convinced that a killed PRRS vaccine would be effective enough to achieve the rapid control claimed by the Chinese. ●

Newly Released Blueprint Lists USDA Agricultural Animal Genomics Priorities

A blueprint that will guide the U.S. Department of Agriculture (USDA) efforts in agricultural animal genomics over the coming decade has been developed and released by the USDA Animal Genomic Strategic Planning Task Force. The 10-year plan addresses research, education and extension in animal genomics to improve animal production systems.

Leading the task force, established in January 2006, was USDA's Agricultural Research Service (ARS) and Cooperative Research State, Education, and Extension Service (CREES). The 13-member task force, composed of USDA employees and university scientists and administrators, obtained significant input during their planning efforts from stakeholder conferences, symposia, workshops and working groups.

"In the past two decades, molecular biology has changed the face of agricultural animal research, primarily in the arena of genomics and several new offshoot areas including functional genomics," stated Dr. Ronnie Green, USDA/ARS, National Program Leader, Animal Production.

"We now have in place a powerful toolbox for understanding the genetic variation underlying economically important and complex phenotypes of agricultural animals. The Blueprint will guide activities in this critical area of science over the coming decade."

The "Blueprint for USDA Efforts in Agricultural Animal Genomics" is

designed as a three-tiered pyramid. At the top of the pyramid is "Science to Practice," which is supported by fundamental and mission-oriented research in "Discovery Science," and is based on a solid foundation of "Infrastructure."

Under the "Science to Practice" tier, Blueprint priorities include 1) whole genome enabled animal selection; 2) prediction of genetic merit of individual animals from genome-based data combined with phenotypes; 3) integration of genome data into large-scale genetic evaluation programs and the use of genomic information to design precision mating systems; 4) precision management systems to optimize animal production, health and well-being; and 5) genomic capabilities that enable parentage and identity verification (traceability).

"Discovery Science" priorities encompass 1) identify genes and gene products that regulate important traits in agricultural animals such as disease resistance, animal well-being, feed efficiency and product quality; 2) understand mechanisms that regulate agriculturally relevant genes in a systems biology framework; 3) define the mechanisms through which specific genes and genetic variation influence phenotypes and phenotypic variation; and 4) understand the roles and interactions of host animal and microbial genomes and environmental influences (e.g. animal feed, vaccines) for improving animal health, well-being and

production efficiency.

The four priorities of the "Infrastructure" tier are 1) genomic tools to connect to phenotype and elucidate pathways of complex traits for all agricultural animal species; 2) national, comprehensive databases and the statistical and bioinformatics tools that integrate genomic, phenotypic and experimental information for each species; 3) genetic resources such as centralized animal populations that are deeply phenotypes as well as repositories for cell lines, DNA and RNA collections and gene expression resources for all species plus broadening the mission of the National Animal Germplasm Program to become a coordinated national repository for genomic DNA, appropriate DNA libraries and specialized cell lines; and 4) education and training of students, scientists and the public on genome-enabled animal sciences and opportunities to help prepare the next generation of scientists plus additional emphasis on extension and outreach to enable and facilitate effective translation of genomics research and resulting technologies to the agricultural animal production sector and the public.

Single copies of this newly released publication may be obtained at no cost, while supplies last, from Dr. Ronnie D. Green, USDA/ARS, National Program Leader, Animal Production, 5601 Sunnyside Ave., Room 4-2104, Beltsville, MD 20705-5148 or by e-mail at ronnie.green@ars.usda.gov.

Gut Atrophy, Proline Relationship Studied

Proline may be a non-essential amino acid in humans, but it may be a conditionally indispensable amino acid in piglets. And recent research shows a Catch-22 when it comes to piglets and proline.

Fact 1: Proline is primarily synthesized within the small intestine. Fact 2: Stress and low feed intake at weaning can commonly cause gut atrophy in piglets. Therefore, during periods of gut atrophy, piglets may not be able to synthesize enough proline to meet their requirement.



To determine the importance of proline to piglets, Canadian researchers fed piglets intravenously to simulate intes-

tinal atrophy to determine supplementation increased protein synthesis measured by amino acid oxidation and/or plasma amino acid concentration to that of a healthy pig.

The results of their research, presented at the Banff Pork Seminar 2007, implies that proline may be an indispensable amino acid in piglets experiencing intestinal atrophy due to the stress of weaning, low feed intake or intestinal disease. The report was printed in the *Advance in Pork Production* (2007), Volume 18, and Abstract A-14.

News Briefs News Briefs News Briefs News Briefs News Briefs

HACCP Approach One Consideration

The United States Department of Agriculture, Veterinary Services, (USDA/VS), National Center of Animal Health Program staff is planning to modify the swine brucellosis and pseudorabies regulations. These regulatory changes are needed to update outdated program standards and uniform methods and rules, yet meet industry and disease risks requirements.

One option the USDA is exploring is the use of Hazard Analysis Critical Control Points commonly called HACCP. The HACCP approach was the focus presentation by Dr. Troy Bigelow, swine disease staff officer, USDA/APHIS/VS, in the transmissible swine disease meeting at the USAHA meeting in Reno, Nev., in mid October.

Bech New Deputy Administrator for BRS

Rebecca Bech has been named deputy administrator for biotechnology regulatory services (BRS) in the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (USDA/APHIS). Bech began her career with APHIS in 1986 and has been with BRS since the program's inception in 2002. She most recently served as associate deputy administrator for BRS' emerging and international programs and as acting deputy administrator for BRS.

Jones Named Deputy Administrator for Legislative and Public Affairs

Bethany Jones has been named deputy administrator of the legislative and public affairs (LPA) in the U.S. Department of Agriculture's Animal and Plant Health Inspection Service (USDA/APHIS). In her new role, Jones is responsible for the overall planning and direction of LPA activities, which include media and industry outreach, legislative analysis, Freedom of Information and Privacy Act requests, production of informational materials, and response to media, congressional, intergovernmental and citizen inquiries about APHIS programs.

100 Years Old

Colorado State University's Department of Veterinary Services turned 100 years old in 2007. The Colorado State Board of Agriculture established the Department of Veterinary Services in 1907, and three years later, the first class—consisting of 27 students—graduated. Today, 100 years after its inception, the CSU College of Veterinary Medicine and Biomedical Sciences receives more than 1,600 applications a year to its professional veterinary program. CSU reports that its college is consistently ranked among the Top 2 colleges of its kind in the nation and receives more federal funding to support research than any other college of its kind.

Dr. Hillman Presented National Assembly Award

Dr. Bob Hillman, Texas State Veterinarian and Executive Director of the Texas Animal Health Commission (TAHC), was presented the 2007 National Assembly Award for his outstanding contributions to U.S. animal health in the regulatory field. The award was presented to Dr.



Dr. Bob Hillman

Hillman at the joint general session of the United States Animal Health Association (USAHA) and the American Association of Veterinary Laboratory Diagnosticians (AAVLD) in Reno, Nev. Dr. Hillman was president of USAHA in 2001 and is currently on the Secretary of Agriculture's Advisory Subcommittee for the National Animal Identification System (NAIS).

One Health Initiative: AVMA, AMA

When animal health challenges such as rabies, bird flu and West Nile virus show up, the potential of human outbreak is there. Well aware of this situation, the American Veterinary Medical

Association (AVMA) and the American Medical Association (AMA) have adopted a collaborative effort, "One Health Initiative," whereby the two national medical organizations will work together. This collaborative effort also extends to bioterrorism risks and biomedical research.

A new AVMA One Health Initiative Task Force, comprised of 12 leaders, will develop strategies to promote collaboration among the various health science associations, colleges, government agencies and industries. A 13th member will represent the AMA. While the task force's main charge is to chart a course for the one-health initiative, it also will identify areas where animal and human medicine are already integrated and where integration is needed, identify potential barriers or challenges to integration, identify potential solutions to overcoming barriers or meeting challenges and prepare a comprehensive written report for the AVMA Executive Board detailing its findings and recommendations.

"I consider the One Health Initiative Task Force as the first step, and most critically important, of the one-health initiative," stated AVMA President Roger Mahr, DVM. "I envision the success of this task force will lead to an integrated national strategy of one health, one medicine."

APHIS Animal Health Award to Dr. Elvinger

Dr. Francois Elvinger, professor of veterinary epidemiology at the Virginia-Maryland Regional College of Veterinary Medicine, Virginia Polytechnic Institute and State University, has been presented the 2007 APHIS Animal Health Award, also known as the APHIS Administrator's Award. Dr. Elvinger was recognized for his contributions to animal health improvement in the areas of information management, animal disease surveillance and appropriate responses to the identification of disease. Dr. Elvinger is currently chair of the National Animal Health Surveillance Steering Committee, which is charged with guiding APHIS' National Surveillance Unit (NSU) in the design, planning and implementation of efficient and accurate surveillance for relevant animal diseases. ●

ID•INFO Survey

(cont'd from page 3)

respondents agreed that "80 to 100 percent" participation would be necessary. Of the remaining respondents, just 6.67 percent thought "60 percent to 80 percent" would be required while 3.33 percent answered "40 to 60 percent" participation. Not one person marked the "less than 40 percent" participation box.

"Incorporate and require ID standards throughout all existing disease programs" and the "other" category received the highest rankings when individuals were posed "What steps do you feel can be taken today that will give the biggest boost toward enhancing participation in a national animal disease traceability system?" Respondents ranked "other" as most important boost with a 1.70 average rank and "incorporate and require ID standards" close to the top with an average rank of 1.72.

About half of respondents who checked the "other" category saw "mandatory" as the answer to enhancing participation. "Other" write-ins that moved this category to be ranked as the biggest boost included public

education, "create a business plan and stick to it," "guarantee privacy and limit liability to producers for infractions" and "make it an industry-run program. . ."

Additional steps that individuals believe would result in the biggest boost toward enhancing participation in a national animal disease traceability system include "Limit implementation to livestock moving into commerce only," 2.52 average rank; "Limit implementation to certain species and movements at highest risk," 2.66 average rank; and "Provide ID devices and data collection infrastructure at no cost to producers and industry," 2.68.

Respondents indicated that less important steps include "Scale back traceability efforts to collecting point of origin and point of termination only" which received a 3.45 average rank, and "Move to a low-cost visible ID device," 3.55 average rank. The least important step, according to survey results, was "Current direction is best course for success."

"While many of the responses to the survey were not earthshaking, the survey did point out that animal disease control remains the key reason why the United

States needs animal traceability systems and that the United States lags behind other developed countries when it comes to having animal traceability systems in place," states Michele Vise-Brown, CEO of the National Institute for Animal Agriculture (NIAA).

"Producers, government and the private sector are all aware of the economic havoc an animal disease can cause the livestock industry and that today's consumers want traceability." ●



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