

# Veterinary Research News

## Legislative Actions

### California voters call for livestock housing changes

Supporters of the controversial Proposition 2 are calling its passage on Nov. 4 a precedent-setting victory. With an estimated 62 percent of California's voters casting ballots in favor of the measure, the new law will affect millions of animals in the nation's largest agricultural state.

Also known as Standards for Confining Farm Animals, Proposition 2 requires California producers to make major alterations to livestock housing systems by 2015. Specifically, egg-laying hens, veal calves, and pregnant sows must have enough room to lie down, stand, turn around, and fully extend their limbs. For instance, a hen must be able to fully spread both wings without touching the side of an enclosure or other hen.

The AVMA praised California voters for taking an interest in the welfare of production animals. And now that the proposition has been passed into law, the Association hopes veterinarians and animal scientists are consulted when the housing regulations are written—a message the AVMA was quick to communicate to the state and national media outlets.

"(V)eterinarians and animal welfare scientists must be involved in its implementation to make sure that resulting changes in animal housing actually improve conditions for the animals they are intended to help," said Dr. W. Ron DeHaven, AVMA CEO.

"If we're not careful, animal health and welfare problems could be precipitated that are as significant as the concerns Proposition 2 aspires to address," Dr. DeHaven cautioned.

Multiple factors contribute to what constitutes appropriate housing for animals, according to Dr. Gail C. Golab, director of the AVMA Animal

Welfare Division. "We agree that more attention needs to be paid to the behavioral well-being of production animals," she said. "In doing so, we don't want to be singularly focused on just providing additional space, as is the case with Prop 2.

"For example, moving laying hens to free-range production systems may allow them to engage in more species-typical behaviors, but it also increases the hens' risks of illness and injury because it increases their exposure to disease vectors and predators."

Dr. Golab says the AVMA can help California producers protect the welfare of their animals by providing information gained from research at home and abroad on alternative production systems. "We can use this information to help avoid animal welfare pitfalls as we assist California farmers in meeting the requirements of Proposition 2," she said.

## From the AVMA

### AVMA online CE makes grand debut

AVMA is unveiling its long-awaited, comprehensive online continuing education program Dec. 1.

AVMA Ed, "Lifelong learning for the veterinary profession," available at [www.avmaed.org](http://www.avmaed.org), is the Association's most important new member service. The online program allows anyone to learn about the latest developments in

veterinary medicine from anywhere, on their time.

AVMA Executive Vice President W. Ron DeHaven said offering CE online is about meeting member needs for everyone, young and old.

"Veterinary medicine is continually evolving. The public is demanding more sophisticated care. Online CE is another way to provide veterinarians an opportunity to advance their education, stay abreast of new knowledge in the profession, and take advantage of new technology," Dr. DeHaven said.

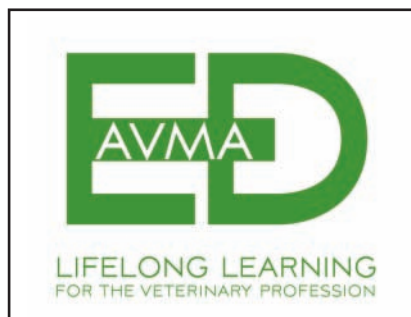
Dr. Althea Jones, AVMA online professional services editor, calls the initiative "standard setting" and a "much-needed CE solution."

Content for AVMA Ed comes from the AVMA Annual Convention and the Association's two scientific journals, *JAVMA* and *AJVR*.

"With so many relevant sessions to choose from on-site, now our members can continue to enrich their knowledge by going online and viewing additional presentations as time permits," said David Little, director of the AVMA Convention and Meeting Planning Division.

Participants who register on the AVMA Ed Web site can browse for free. To view the full offerings and take an examination will require a credit card payment. Nonmembers are welcome, but AVMA members receive a discount, and Student AVMA members enjoy free access. Also, one free course will be offered to every user through Dec. 31.

Approximately 50 hours of convention presentations are now available on the site. These 50-minute sessions are subdivided into shorter segments for easier viewing. Additional features such as speaker biographies and notes are included. Two to three articles from each issue



of the *JAVMA* are available, beginning with the Oct. 1, 2008 issue. A five-question test following a review of the online presentation or article can earn a participant one hour of CE credit, when successfully completed.

In addition to being used for CE and credit, AVMA Ed is a valuable resource for the general public and allied health professionals as well as foreign licensees and their institutions.

Topics covered include small animal veterinary medicine, bovine medicine, equine medicine, animal welfare, animal behavior, practice management, oncology, dentistry, neurology, swine medicine, and aquatic animal medicine.

Will the AVMA's online CE be accepted by all licensing boards?

"Most states, we have found, understand the value of online CE, especially from a trusted, recognized source," Dr. Jones said.

### **AVMA fellows find home in Senate**

The AVMA announced Oct. 20 that its two 2008-2009 Congressional Science Fellows have accepted positions in offices on Capitol Hill. The fellows are serving in capacities that coincide with their interests and enable them to provide expertise to Congress, all while serving the veterinary profession.

The fellows—Dr. Gail R. Hansen and Dr. Whitney Miller—are working in offices supporting the Senate. Dr. Hansen accepted a position in the office of Vermont Sen. Bernard Sanders, where she is working on the national cancer registry, health care reform, and antimicrobial resistance. Dr. Miller is working on the Senate Homeland Security Committee and focusing on biosecurity and emergency medical preparedness issues.

Dr. Hansen, who received her DVM degree from the University of Minnesota and a master's in public health from the University of Washington, was previously the state epidemiologist for the Kansas Department of Health, focusing on infectious diseases. Dr. Hansen has an adjunct faculty position at the Kansas State University College of Veterinary Medicine, and works with

the public health programs at KSU and the University of Kansas Medical Center.

Dr. Miller received a DVM degree and an MBA from Colorado State University and has experience in food safety, foreign animal disease diagnosis and control, the drug approval process, and various aspects of creating, implementing, and interpreting policy.

AVMA fellows provide science-based knowledge and information to the public policy-making process. Additionally, the fellowship program offers veterinarians a wide variety of opportunities to learn how federal public policy is made and to influence outcomes.

Fellows spend one year in Washington, D.C., beginning at the end of August, and receive a stipend, plus other reimbursable expenses.

For more information about the AVMA Congressional Science and Executive Branch Fellowship and the requirements, or to apply, contact Dorothy Gray, associate director of the AVMA Governmental Relations Division, at (800) 321-1473, Ext. 3209, or at [fellowship@avma.org](mailto:fellowship@avma.org). The application deadline for the 2009-2010 fellowship is Feb. 12, 2009.

### **Euthanasia panel nominees sought**

The AVMA is seeking members for the panel that will contribute to the next edition of the AVMA Guidelines on Euthanasia. The current guidelines are at [www.avma.org/issues/animal\\_welfare/euthanasia.pdf](http://www.avma.org/issues/animal_welfare/euthanasia.pdf).

December 31 is the deadline for nominations and letters of interest for the AVMA euthanasia panel working groups. See *AJVR*, November 2008, page 1381, for details, or visit [www.avma.org/onlnews/javma/nov08/081101c.asp](http://www.avma.org/onlnews/javma/nov08/081101c.asp).

### **AVMA invites award nominations**

Members of the AVMA are invited to nominate qualified recipients for the 2009 AVMA awards, which will be presented at the 146th AVMA Annual Convention, July 11-15 in Seattle.

For nomination forms, information on supporting materials, awards criteria, the selection process, and a listing of past award recipients, visit

the AVMA Web site at [www.avma.org/awards](http://www.avma.org/awards).

Information may also be obtained by contacting the following individuals about each specific award:

For the AVMA Animal Welfare Award, Bustad Companion Animal Veterinarian of the Year Award, and AVMA Humane Award, contact Kathy Sikora, Animal Welfare Division, at (800) 248-2862, Ext. 6635, or [ksikora@avma.org](mailto:ksikora@avma.org).

For the AVMA Award, Charles River Prize, AVMA Meritorious Service Award, Royal Canin Award, and XIIth International Veterinary Congress Prize, contact Julie Granstrom, Office of the Executive Vice President, at (800) 248-2862, Ext. 6605, or [jgranstrom@avma.org](mailto:jgranstrom@avma.org).

For the AVMA Lifetime Excellence in Research Award and AVMA Practitioner Research Award, contact Debbie Summers, Education and Research Division, at (800) 248-2862, Ext. 6778, or [dsummers@avma.org](mailto:dsummers@avma.org).

For the AVMA Public Service Award, contact Tracy Olsen, Scientific Activities Division, at (800) 248-2862, Ext. 6636, or [tolsen@avma.org](mailto:tolsen@avma.org).

Nominations for all awards must be submitted by Feb. 2, 2009, except for the Bustad Companion Animal Veterinarian of the Year Award, which has a nomination deadline of March 2, 2009.

## **Regulatory Actions**

### **Veterinary Master Files a source of drug data**

Veterinary Master Files contain publicly available data that can be used by companies or others to seek approval of a New Animal Drug Application.

At [www.fda.gov/cvm/VMF/vmf.htm](http://www.fda.gov/cvm/VMF/vmf.htm), the Food and Drug Administration's Center for Veterinary Medicine provides a list of Veterinary Master Files, applicable to the chemistry, manufacturing, and controls for a finished dosage form or a bulk drug substance. Redacted or edited to remove confidential information, the list contains file category (or type), number, status (active or inactive), holder's name, and chemical name or subject.

Veterinary Master Files are classified in five categories that cover such areas as manufacturing site, operating procedures, manufacturing information, materials used in preparation and packaging. The CVM has eliminated the need to submit or update a type I VMF and classified such files as inactive.

Inquiries should be submitted to [CVMHomeP@cvm.fda.gov](mailto:CVMHomeP@cvm.fda.gov) or to Mai Huynh Supervisory Team Leader, Division of Manufacturing Technologies, Office of New Animal Drug Evaluation, Center for Veterinary Medicine, 7500 Standish Place, Rockville, MD 20855.

Additional information can be found at that Web site under "Master Files, Guidance for Industry for the Preparation and Submission of Veterinary Master Files."

## Funding Announced

### **\$75M dedicated to nonsurgical contraception for cats and dogs**

Stalled attempts at creating an alternative to surgical sterilization for cats and dogs have received a jump-start in the form of a \$75 million donation; its goal—bringing to market a safe, affordable drug that will help curb dog and cat overpopulation.

The nonprofit Found Animals Foundation announced Oct. 16 at the SPAY/USA Conference in Chicago that it will award \$25 million to the first person or group that develops a safe and efficacious nonsurgical means of permanently sterilizing cats and dogs. An additional \$50 million in grants is available for nonsurgical sterilization technology that has promise.

A single-dose, nonsurgical sterilant would be an ideal solution, according to Found Animals Executive Director Aimee Gilbreath. "Surgical spay/neuter procedures are just too expensive and inconvenient for many pet owners—we need a better solution," Gilbreath said.

The Found Animals Foundation is partnering with the Alliance for Contraception in Cats and Dogs to assist in the foundation's efforts. The mission of the ACC&D is to expedite the successful introduction of methods to nonsurgically sterilize pets and to support the distribution and promotion

of these products to humanely control cat and dog populations worldwide.

In addition to addressing dog and cat overpopulation in the United States, the Michelson Prize seeks to make sterilization accessible and affordable worldwide and aid developing countries, where this problem is even greater.

Details about the Michelson Prize in Reproductive Biology and Michelson Grants in Reproductive Biology are posted on the Found Animals Foundation Web site at [www.found-animals.org](http://www.found-animals.org).

### **Company funds research on porcine circovirus**

Boehringer Ingelheim Vetmedica Inc. has awarded funding of \$25,000 apiece for three one-year studies of porcine circovirus-associated disease.

The 2008 PCVAD Research Awards went to the following recipients:

- Dr. Brad Leuwerke, Swine Vet Center, for a study to determine the influence that maternal antibodies to porcine circovirus type 2 have on the efficacy of circovirus vaccination in young pigs
- Dr. Tanja Opriessnig, Iowa State University College of Veterinary Medicine, for a study on the prevalence of PCV2 and persistent infection in conventional newborn pigs and a study to evaluate the influence of porcine reproductive and respiratory syndrome virus on the efficacy of circovirus vaccination in conventional growing pigs

Additional information about the PCVAD Research Awards is available at [www.PCVADresearch.com](http://www.PCVADresearch.com).

## Resources

### **One-health Web site debuts**

The one-health initiative now has a Web site featuring news, upcoming events, and important information about the movement to forge closer collaborations among veterinarians, physicians, and other scientific-health related disciplines.

The Web site, [www.onehealthinitiative.com](http://www.onehealthinitiative.com), had more than 4,000 visitors from 110 countries in the first two weeks of going live Oct. 1, according to Dr. Bruce Kaplan, the veterinarian

who manages the site collaboratively with his One Health physician colleagues Thomas P. Monath, MD, and Laura H. Kahn, MD.

The site offers a host of informational resources, including a link to the AVMA One Health Initiative Task Force report, copies of the One Health Newsletter, and a list of people and organizations that have endorsed the one-health concept.

Supporters are invited to provide Dr. Kaplan with pertinent one-health news, upcoming events, and publications by contacting him at [brucekaplandvm@onehealthinitiative.com](mailto:brucekaplandvm@onehealthinitiative.com).

### **New Web site gathers pesticide incidents involving animals**

The National Pesticide Information Center has developed a Web site for veterinarians to report pesticide incidents involving animals.

The Web site is for the use of veterinarians only. It can be accessed through a link on the AVMA Web site ([www.avma.org](http://www.avma.org)) under the Animal Health Section by clicking on "Adverse event reporting."

The reporting site was developed by the NPIC with input from the AVMA Clinical Practitioners Advisory Committee and the AVMA Council on Biologic and Therapeutic Agents.

The site was designed to capture the optimal amount of relevant information while providing a form that is quick for busy practitioners to fill out. Several pieces of information are required, the most important of which is identification of the pesticide product, preferably by the Environmental Protection Agency registration number located on the label. If the registration number is not available, the veterinarian may enter the product name and active ingredient.

The data will be evaluated by the EPA Office of Pesticide Programs. Most of the reports of more severe pesticide-induced incidents the agency receives are neurologic or dermatologic in nature. The reports vary in quality and in information reported. It is expected that reports received from veterinarians will help to better characterize the incident reports presently received by the EPA.

Reports generated from this new data base will also be provided to the AVMA.

## Research in Progress

### **New DNA test will help breeders prevent equine cerebellar abiotrophy**

A genetic test has been developed to screen for a genetic, neurologic condition found almost exclusively in Arabian horses.

Cecilia Penedo, PhD, a geneticist at the University of California-Davis Veterinary Genetics Laboratory, and her research team created the test for equine cerebellar abiotrophy.

Results from breeding research conducted at UC-Davis indicate a recessive mode of inheritance for this condition. The disease is transmitted when two carrier horses are bred. A foal has a 25 percent chance of receiving the genes that cause the disease, which manifests itself shortly after birth. The disease causes the death of neurons in the cerebellum of affected foals. The horses may have mild to severe tremors of the head, and they can easily lose their balance. Horses affected by cerebellar abiotrophy are prone to falls, making them unsafe to ride and more likely to become injured.

Research began on cerebellar abiotrophy when geneticist Ann Bowling started a project at UC-Davis School of Veterinary Medicine in 1985. Several breeders have assisted in identifying Arabian equine families affected by the genetic condition, and financial support has come from the Arabian Horse Foundation and others.

## Research Results

### **Genetic mutation may cause BSE**

New findings suggest that bovine spongiform encephalopathy

can sometimes result from a genetic mutation.

Drs. Juergen A. Richt of Kansas State University and S. Mark Hall of the National Veterinary Services Laboratories published the research online Sept. 12 in the journal PLoS Pathogens.

According to the article, a 10-year-old cow from Alabama with an atypical form of BSE had a mutation in the prion protein gene analogous to the mutation in humans with the genetic form of Creutzfeldt-Jakob disease.

Researchers believe that BSE is primarily a foodborne disease. Humans contract variant CJD by eating products from cattle with BSE.

## Grant Proposals Invited

### **Company requests proposals for PRRS research awards**

Boehringer Ingelheim Vetmedica Inc. seeks research proposals for studies investigating porcine reproductive and respiratory syndrome.

The company will provide three \$25,000 awards through its 2009 Advancement in PRRS Research Awards program to swine practitioners, diagnosticians, or researchers to investigate new ways to diagnose, control, and eradicate this costly swine disease.

An independent review board selects proposals on the basis of criteria that include economic impact on the swine industry, originality and scientific quality, and probability of success in completing the yearlong study.

The deadline for submitting proposals is Jan. 1, 2009. Submissions should include a cover sheet, curriculum vitae, and two letters of recommendation. The mailing address is Boehringer Ingelheim Vetmedica

Inc., Attn.: Trudy Luther, The Advanced PRRS Research Award, 5506 Corporate Drive, Suite 1600, St. Joseph, MO 64507-7752.

More information is available at [www.PRRSresearch.com](http://www.PRRSresearch.com).

## The Veterinary Community

### **Iowa State dedicates medical center**

Iowa State University College of Veterinary Medicine dedicated the new Dr. W. Eugene and Linda Lloyd Veterinary Medical Center at an Oct. 18 ceremony.

The 108,000-square-foot addition to the college increases space by 25 percent. The center features equine and food animal diagnostic areas, treatment and surgery suites, patient wards, imaging facilities, an intensive care unit, and an isolation unit. The project also added a new biosecurity unit to the Veterinary Diagnostic Laboratory.

The project is the first part of a two-phase expansion program to increase capabilities of the 32-year-old veterinary teaching hospital. The second phase includes updating the spaces of services that are relocating to the new facility.

Dr. W. Eugene Lloyd (ISU '49) and his wife pledged \$3.5 million to the project. Other funds for the \$48 million expansion program came from state and private support.

The new space accommodates class sizes that the veterinary college is increasing to meet the demand for veterinarians, particularly in food supply veterinary medicine.