



Veterinary Research News

From the AVMA

Leaders advance AVMA strategic initiatives

Members of the AVMA Executive Board and House Advisory Committee called on members of Congress and staffers April 15, culminating the AVMA's biennial legislative contact visit to Washington, D.C. AVMA leaders arrived in the capital April 13 after the Executive Board's spring meeting at headquarters in Schaumburg, Ill.

On Capitol Hill, the AVMA representatives carried the AVMA's key messages to the legislative contacts, urging them, for example, to retain the Veterinary Workforce Grant Program in the final version of the Farm Bill.

The veterinary workforce is one of the AVMA's five critical issues, along with animal welfare, economic viability, veterinary education, and advocacy. On the basis of those issues, the board had approved strategic goals in June 2007. This April, the board took several new decisive steps forward.

First, the board approved the AVMA Strategic Plan, which outlines the five major goals and their respective objectives. Then a \$1 million strategic goal fund was approved within the AVMA reserves, earmarked for funding tactical plans and programs. Recommendations to approve and fund each tactic will be sent to the board as they are developed. During the board's daylong strategic planning session April 10, AVMA Executive Vice President Ron DeHaven described the tactics as on-the-ground activities that will help accomplish the AVMA objectives.

The first four tactics were approved at the meeting. The board authorized (1) creation of a pilot program of veterinary outreach to law schools and the legal community, (2) ongoing funding for use by the AVMA

Communications Division to implement communications tactics for the Governmental Relations Division, (3) sponsorship and promotion of a National FFA proficiency award in veterinary medicine, and (4) formation of a Foresight Report Task Force to review this 2007 report on the future direction for academic veterinary medicine.

Besides the board's Capitol Hill visit, the AVMA emphasis on legislative advocacy was reflected in another way. The board approved a recommendation from the Legislative Advisory Committee to create an AVMA Advocacy Award that recognizes veterinarians and nonveterinarians for work to advance the AVMA legislative agenda and to advocate on behalf of the veterinary profession.

The board approved other noteworthy recommendations, such as establishment of an AVMA online learning program. Professional online courses will be developed with content from the AVMA Annual Convention and scientific journals and will be offered for continuing education credit. The program is expected to be launched in the fourth quarter of 2008.

The AVMA Veterinary Medical Assistance Teams received the go-ahead to move in a new direction, focusing on disaster preparedness and response activities at the state level. The VMATs provided veterinary emergency services for the federal government from 1993-2007. The federal government recently developed its own veterinary response team, so now the VMAT program seeks to fill gaps at the state level. The program will offer services in the areas of early assessment, basic veterinary treatment, and training in disaster response.

The board approved a number of new policies or policy revisions relevant to the welfare of animals including cattle, horses, captive elephants, and wildlife.

The board approved revisions to the policy on "Castration and dehorning of cattle," adding details about pain control and acceptable procedures, after some debate. Dr. Gail C. Golab, director of the AVMA Animal Welfare Division, said the Animal Welfare Committee's perspective is that increasing the amount of guidance in the policy is consistent with the AVMA's commitment to being a scientific resource on issues of animal welfare. Dr. M. Gatz Riddell, executive director of the American Association of Bovine Practitioners, agreed that the science on these procedures supports specificity in AVMA policy.

In other actions relevant to animal welfare, the board approved a new policy on "Humane transport of equines," opposing the use of double-deck trailers to transport horses because of safety concerns. A new policy on "Elephant guides and tethers" outlines appropriate use of elephant guides and tethers as training and management tools. The board also revised the AVMA policy on trapping to recognize some necessary applications in wildlife management and research for steel-jawed leghold traps that incorporate modifications to reduce physical injury to animals.

The new Exotic Companion Mammal specialty practice area received provisional recognition from the AVMA, following review by the AVMA American Board of Veterinary Specialties. The specialty will fall under the umbrella of the American Board of Veterinary Practitioners, which has specialties in a number of practice areas. The new specialty practice area will focus on ferrets, rabbits, guinea pigs, rodents, and other small exotic mammals that people keep as pets.

In another action relevant to specialties, the board approved a

follow-up workshop during the 2009 ABVS meeting to continue discussions regarding the impact of potential shortages of academic veterinary specialists.

The board approved funding for the business working group of the One Health Initiative Task Force to meet with potential sponsors of a business plan to financially support the one-health initiative. The task force expressed hopes of obtaining substantial commitments and endorsements prior to presenting its report and recommendations to the board this month.

At the April meeting, the board approved \$67,000 from the contingency fund and \$175,100 from the AVMA reserves, including \$83,100 from the new earmarked strategic fund. In addition, \$136,022 was authorized to be added to the 2009 budget, resulting in a revised budget that will be sent to the House of Delegates projecting \$95,978 in income over expenses.

Highlighting a few other actions, the board approved the following:

- an addition to the AVMA Principles of Veterinary Medical Ethics stating that veterinarians should disclose potential conflicts of interest to clients
- active pursuit of passage for National Research Support Project-7, the Department of Agriculture's program to develop new drugs for minor uses and minor species
- support for reauthorization of the Animal Drug User Fee Act, which bolsters the product review and approval process at the Food and Drug Administration's Center for Veterinary Medicine
- a partnership with the Alliance for Rabies Control to collaborate on outreach opportunities for World Rabies Day, Sept. 28
- a policy on "Pet food health claims" to replace the policy on "Pet food therapeutic claims," partly to add a recommendation that the FDA require pet foods with health claims to include a statement indicating that the agency has not evaluated the claims
- a policy on "Truthful and non-misleading human food labeling" to support labels regarding production practices that provide clear, unambigu-

ous, scientifically valid, and verifiable claims

- a change in dues for AVMA members who have retired, who will be eligible for a dues reduction of 50 percent rather than a dues exemption—which the AVMA will reserve for Honor Roll members
- consultative site visits by the Council on Education to Universidad Autónoma de Baja California Instituto de Investigaciones en Ciencias Veterinarias in Mexico, University of Copenhagen Faculty of Life Sciences in Denmark, and University of Liverpool Faculty of Veterinary Science in England

Nominations being accepted for at-large council vacancies

No nominations for two AVMA council vacancies were received by the April 1, 2008, deadline, and the only nominee for a third vacancy withdrew after being hired by the AVMA PLIT. The vacancies are to be filled at the AVMA House of Delegates session in New Orleans, July 18-19.

One position is an unexpired term ending in 2012 on the Council on Communications in the category of private practice, predominantly food animal. The other two positions are each full six-year terms on the Council on Veterinary Service, one for a position representing private mixed practice, predominantly food animal or equine and the other representing private practice, exclusively equine.

In accordance with Manual of the House of Delegates, the three positions are now temporarily reclassified as at-large categories, since no nominations were received. All voting members of the AVMA are now eligible to fill either vacancy.

Organizations wishing to nominate candidates for these at-large vacancies must submit a nomination form to the Office of the Executive Vice President no later than July 1, 2008. Visit the AVMA Web site, www.avma.org/about_avma/governance/volunteering, to obtain general information about all the councils, as well as for the at-large nomination form.

Inquiries can be e-mailed to officeEUP@AVMA.org or called into AVMA headquarters at (800) 248-2862, Ext. 6605.

Research Results

Study links occupational exposures with risk of miscarriage

A new study out of Australia suggests that pregnant veterinarians who have occupational exposures to anesthetic gases, radiation, or pesticides may have twice the risk of miscarriage.

Similar studies in the United States, however, have found only that occupational exposures to radiation or anesthetic gases have a weak or insignificant association with the risk of miscarriage among veterinarians or other veterinary personnel.

In general, the AVMA as well as U.S. veterinary specialists in radiology and anesthesiology do recommend that pregnant veterinary personnel pay special attention to protective measures for reducing occupational exposures. The Australian study came to the same conclusion.

The study, "Maternal occupational exposures and risk of spontaneous abortion in veterinary practice," appeared online ahead of print in the *British Medical Journal: Occupational and Environmental Medicine*. The study analyzed self-reported occupational exposures in relation to miscarriage among Australian veterinarians during 940 pregnancies from 1960-2000.

The authors reported finding significant associations between risk of miscarriage and having occupational exposure to unscavenged anesthetic gases for one or more hours per week, performing more than five radiographic examinations per week, or using pesticides at work.

The "AVMA position on veterinary facility occupational risks for pregnant workers" starts by stating: "Although scientific data concerning the reproductive health effects of many occupational exposures is limited, the goal of creating a safe work environment for pregnant workers can be facilitated by awareness of inherent risks and then

adopting procedures to minimize risk exposure."

The policy lists radiologic, biologic, and chemical exposure as areas of concern for pregnant workers. The policy states that pregnant workers ideally should avoid exposure to X-rays, anesthetic gases, and pesticides. The policy also notes biologic risks to pregnant workers from rabies, tetanus, toxoplasmosis, and other diseases as well as from animal bites.

According to the policy, any worker who cannot avoid X-ray exposure should wear shielding and a monitoring badge. To reduce exposure to anesthetic gases, veterinary facilities should maintain anesthetic machines to ensure leak-free operation and use efficient scavenger systems to remove waste gases.

To reduce pesticide exposure, ventilation is essential, and pregnant workers should wear protective clothing to minimize absorption of pesticides through the skin. The AVMA policy adds that handling hormones and chemotherapeutic agents requires the same precautions.

The AVMA policy on pregnant workers is online at www.avma.org/issues/policy. The policy urges workers who become pregnant or plan to become pregnant to consult with their obstetrician and inform their employer as soon as possible.

Public Health

One-health concept central at conference on infectious disease

Antimicrobial resistance, avian influenza, and climate change are among the topics that illustrate interconnections among human, animal, and environmental health.

These topics and other interdisciplinary health matters were the subject of many sessions during the sixth International Conference on Emerging Infectious Diseases, March 16-19 in Atlanta. The one-health concept was a theme throughout ICEID 2008.

Dr. Roger K. Mahr, advocate of the one-health concept and AVMA immediate past president, described the philosophy of "One World, One Health, One Medicine" at a session early in

the meeting. Thomas P. Monath, MD, a member of the AVMA One Health Initiative Task Force, spoke on behalf of the American Medical Association.

Some discussion during the meeting addressed antimicrobial resistance in human and animal pathogens. Antimicrobial-resistance plasmids also are present in microbial flora in the environment.

Further discussion concerned transmission of methicillin-resistant *Staphylococcus aureus* among humans, companion animals, and production animals. Speakers talked about MRSA in pets and a different strain of MRSA that scientists identified recently in swine in the Netherlands and Canada.

Dr. Albert Osterhaus, a virologist at Erasmus Medical Center in the Netherlands, spoke about relationships between human and animal viral pathogens. Various viruses in animals offer opportunities for emergence of new zoonotic diseases. Dr. Osterhaus emphasized the need for interdisciplinary collaboration to understand these zoonoses.

A number of sessions during ICEID 2008 tackled the subject of highly pathogenic H5N1 avian influenza.

Nancy Cox, PhD, director of the Influenza Division at the Centers for Disease Control and Prevention, said a human pandemic arising from H5N1 avian influenza may be unpredictable and unpreventable. Rapid detection and response efforts will be key if or when the virus mutates to transmit easily among humans.

Dr. Les Sims of Asia Pacific Veterinary Information Services in Australia said eradication of H5N1 avian influenza won't occur in the foreseeable future. The medium-term strategy of vaccination comes with challenges such as finding funding, measuring efficacy, and monitoring antigenic variation.

One of the meeting's messages was the need for ecologic research to understand the impact of environmental health on animal and human health.

Howard Frumkin, MD, director of the CDC National Center for Environmental Health, spoke about the impact of climate change on public

health. Areas of potential concern include food security, water supplies, air pollution, and vectorborne disease.

Regulatory Actions

FDA issues rule banning substances from animal food, feed

To further strengthen existing safeguards against bovine spongiform encephalopathy, the Food and Drug Administration has issued a rule amending its regulations to prohibit the use of certain cattle-origin materials in the food or feed of all animals.

The final rule took effect April 27 after its publication two days earlier in the Federal Register.

Prohibited materials include the following:

- the entire carcass of BSE-positive cattle
- the brains and spinal cords from cattle 30 months of age and older
- the entire carcass of cattle not inspected and passed for human consumption that are 30 months of age or older from which brains and spinal cords were not removed
- tallow that is derived from BSE-positive cattle
- tallow that is derived from other materials prohibited by this rule that contains more than 0.15 percent insoluble impurities
- mechanically separated beef that is derived from the materials prohibited by this rule

The FDA considered more than 840 comments it received since it published the proposed rule in the Oct. 6, 2005, Federal Register. To view the final rule in the April 25 Federal Register, go to <http://edocket.access.gpo.gov/2008/pdf/08-1180.pdf>.

For further information, contact Burt Pritchett, Center for Veterinary Medicine (HFV-222), Food and Drug Administration, 7519 Standish Place, Rockville, MD 20855; phone, (240) 453-6860; or e-mail, burt.pritchett@fda.hhs.gov.

Funding Announced

Cornell fellows program to address shortage of academic specialists

The Cornell University College of Veterinary Medicine has created a

two-year Clinical Fellows Program to help address the growing shortage of academic specialists who conduct research and teach students.

The two-year program, available to veterinarians who have completed a three-year residency, offers an annual salary of \$60,000 plus benefits and \$15,000 per year in funding for a research project. The goal is to help participants start paying off student loans while preparing for a position in academic medicine, which traditionally would require them to complete an additional degree.

Applicants must identify a suitable mentor at Cornell and submit a research project description. The veterinary college has accepted three fellows to start in August, with hopes of expanding the program to five participants in future years.

Funding for the first group of fellows will come, in part, from the Zweig Fund for Equine Research and endowment money from the Feline Health Center.

The next call for applications will be in the fall, and information will be available on the veterinary college's Web site at www.vet.cornell.edu.

The Veterinary Community

Veterinarian performs maneuvers at space station



Anchored to a mobile foot restraint, Linnehan participates in the third EVA.

Mission specialist Rick Linnehan executed many of the intricate EVA—extravehicular activity—maneuvers involved in installing a laboratory module and a robotic system on the international space station, Alpha.

Linnehan, an astronaut and veterinarian, served on the crew of the longest shuttle mission to the international space station and teamed up for three of the record-setting five spacewalks at the orbiting laboratory.

The 16-day mission of STS-123 began March 11 with an unusual night launch of the space shuttle Endeavour from Kennedy Space Center in Cape Canaveral, Fla.

Endeavour's seven astronauts conducted 12 days of cooperative work with the three-member space station crew and ground teams around the world to install the first section of the Japan Aerospace Exploration Agency's Kibo laboratory and the Canadian Space Agency's two-armed robotic system, known as Dextre.

Another important aspect of the 123 mission was transferring one international partner to and another from the space station as part of the changeover from Expedition 16—the 16th station crew—to Expedition 17.

Endeavour's March 26 landing at Kennedy Space Center signaled the end of Dr. Linnehan's final flight. With only another 10 or so missions left in the current shuttle program, other astronauts await their turn.

"I'm still an active NASA astronaut," Dr. Linnehan said. "I plan on returning to Houston or perhaps NASA headquarters in Washington, D.C., working special life sciences and EVA projects for the Constellation program." Constellation is America's program to send a new generation of explorers to the moon aboard the Orion CEV. It is in the design phase.

Dr. Linnehan, who received his DVM degree in 1985 from The Ohio State University, is a visiting assistant professor in the Environmental Medicine Consortium at the North Carolina State University College of Veterinary Medicine, Harbor Branch Institute, in Fort Pierce, Fla., and a board member of the Channel Islands Marine and Wildlife Institute in Santa Barbara, Calif.

His special interests are marine mammal medicine, reptiles, and global public health and environmental monitoring.

Reynolds to serve as dean of Atlantic Veterinary College

The University of Prince Edward Island has appointed Dr. Donald L. Reynolds as dean of the Atlantic Veterinary College, with a six-year term starting in August. He will succeed Dr. Timothy H. Ogilvie, who has served as dean for two terms.



Dr. Donald L. Reynolds

Currently, Dr. Reynolds is the associate dean of research and graduate studies at the Iowa State University College of Veterinary Medicine. He serves as associate director of the college's Veterinary Medical Research Institute and assistant director of the ISU Agricultural Experiment Station. He also is a professor of veterinary microbiology and preventive medicine.

Dr. Reynolds' research has focused on avian medicine and food safety. He has specific interest in enteric diseases of poultry, particularly viral disease of young turkeys; respiratory diseases of poultry, primarily the pathogenesis of Newcastle disease and of avian pneumovirus; and *Campylobacter* and *Salmonella* bacteria.

A member of the American Association of Avian Pathologists, Dr. Reynolds has served on the AAAP board of directors and the editorial board of the AAAP journal *Avian Diseases*. He is active with the AVMA, currently representing veterinary research on the Council on Research and previously serving on the Council on Biologic and Therapeutic Agents from 1999-2005. He also served on the board of governors for the American College of Veterinary Microbiologists for several years.

He earned his veterinary degree from The Ohio State University in 1981.