

Veterinary Research News

The Veterinary Community

Veterinary research needs study begins

The problems with veterinary research are real, the effects far-reaching, and the outlook bleak.

This is what stakeholders told the committee that is embarking on the National Academy of Sciences "National Needs for Research in Veterinary Science" study. Jim Womack, PhD, director of the Center for Animal Biotechnology and Genomics at Texas A&M University, is chair of the committee.

The group held its first meeting in early May in Washington, D.C., and allowed the sponsors to weigh in with their views. The committee received input from the AVMA, Association of American Veterinary Medical Colleges, National Institute of Environmental Health Sciences, American Animal Hospital Association, and National Association of Federal Veterinarians.

"(Veterinary researchers) have an inability to do all the work that needs to be done," said Dr. Bonnie Beaver, AVMA president-elect.

Endemic diseases such as John's are devastating from an economic as well as welfare standpoint. Zoonotic pathogens are a constant threat and make up nine of the top 10 germ warfare agents. The introduction of a foreign animal disease could wreak havoc.

Dr. Beaver noted that the United States might not be ready when a foreign animal disease hits. For example, Plum Island Animal Disease Center is the only facility in the country where live foot-and-mouth disease virus is studied.

Dr. Darlene Dixon is laboratory head of the comparative pathobiology group at the NIEHS. The institute studies environmentally associated diseases, relies heavily on animal

research, and is in need of veterinary researchers, she said. In addition to performing the research, veterinarians help the agency work toward reducing, replacing, and refining animal use, by creating and validating alternative models.

Dr. John Albers, executive director of AAHA, emphasized that veterinarians have little data on the apparent increase of several diseases in companion animal medicine, including diabetes and obesity in cats and dogs, thyroid disease in cats, and leptospirosis in dogs. Good incidence data, however, don't exist. This represents a significant deficiency in the area of research, which could also affect human medicine.

Incidence information that does exist is troubling and highlights other areas that are lacking. According to Dr. Beaver, behavior problems alone lead to the deaths of 13 million dogs and cats per year. Dogs bite four million people each year in the United States. Clearly, behavior needs further exploration.

In listing their concerns, stakeholders hit on most areas of veterinary research. They also identified what they perceived as possible sources of the problems.

Dr. Larry Heider, executive director of the AAVMC, says money is not flowing out of government agencies fast enough. The USDA puts about 90 percent of its funding intramurally,

whereas the NIH is just the flip-flop of that—90 percent goes extramurally, Dr. Heider said.

Manpower is another problem. The United States does not have enough veterinarians, and with the U.S. population growing, the problem will only get worse. Currently, there are 8.8 veterinarians per million people in the United States. Unless the number of veterinary graduates increases, the country will have about a third fewer veterinarians per million population by 2050, Dr. Heider explained.

Veterinarians also need to be encouraged to enter research careers and obtain advanced degrees. Many veterinarians are drawn to the more lucrative areas, such as small animal practice. "We have got to come up with a financial motivation," said Dr. Dale Boyle, executive vice president of the NAFV.

Because few veterinarians are researchers, role models for young veterinarians who are trying to decide on a career path are scarce.

Even with enough veterinarians, infrastructure problems exist on multiple levels. According to Dr. Heider, the number of veterinary colleges increased after World War II, and then the last years the federal government funded infrastructure for veterinary training and advanced degrees or residency programs were the late 1960s and early 1970s. Since the 1970s, with the exception of Western University's new veterinary college, the number of colleges has not increased, and there's no indication it will.

Existing veterinary research facilities are also lacking. "The facilities at Plum Island are cake, at best," said Dr. Beaver, who visited the 50-year-old facilities this past year. The laboratories need updating, and the ferries that transport employees to and from the island pose logistic problems.

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And then, there's the problem with coordination. Several years ago, when veterinarians started recognizing sarcomas associated with vaccination injection sites, they did not have a government agency they could turn to for research funding. They had to come up with a solution themselves: a coalition of veterinary organizations pooling their resources and forming the Vaccine Associated Feline Sarcoma Task Force.

In the coming months, the committee will identify the national capacity—expertise and number of scientists, specialized facilities, program funding, and institutional capacity—required to conduct the needed research and make recommendations as to how to meet the need. The report, which will focus on the fields of public health and food safety, animal health, and comparative medicine, will be completed by spring 2005.

The NAS committee members reflected that, because there may not be enough veterinarians to meet the research need, the gap might have to be filled with other types of scientists working in collaboration with veterinarians.

The next committee meeting, scheduled for July 19-20 in Washington, D.C., will also provide a period for public comment. Interested individuals are encouraged to attend. For more information on the NAS study and the upcoming meeting, visit www4.nationalacademies.org/cp.nsf and search under "veterinary research."

Veterinary food supply coalition formed

The AVMA has joined the American Association of Bovine Practitioners, the American Association of Small Ruminant Practitioners, the American Association of Swine Veterinarians, the Association of American Veterinary Medical Colleges, and the Academy of Veterinary Consultants to form a new coalition to ensure that food continues to be abundant, safe, and wholesome by involving veterinarians throughout the food supply system.

Representatives from each organi-

zation met in Chicago on May 17 to finalize an agreement to establish the Food Supply Veterinary Medicine Coalition. The coalition is a new, formalized group that evolved from the former Food Animal Summit Task Force.

"Food supply veterinary medicine" is the term the coalition has adopted to encompass all aspects of veterinary medicine's involvement in food supply systems, from traditional agricultural production to consumption.

The coalition's first major project is a comprehensive study comprising multiple research phases addressing the demand for, and the availability of, food supply veterinarians in the United States and Canada. The coalition has selected David M. Andrus, PhD, a professor and head of the department of marketing at Kansas State University, to lead the research team conducting the study, "Estimating FSVM Demand and Maintaining the Availability of Veterinarians for Careers in Food Supply Related Disciplines in the United States and Canada."

"This study will have profound and lasting effects on food supply veterinary medicine, and it is hoped that it will serve as a framework for planning for the future," said Dr. Rod Sydenham, chair of the coalition.

Bayer Animal Health and the AVMA have each committed \$100,000 to pay for the estimated \$300,000 cost of the project. The other \$100,000 was pledged by the AABP (\$50,000), AASV (\$40,000), and AAVMC (\$10,000).

The project will also address student recruitment and selection, retention of students and veterinarians, and appropriate training of food supply veterinarians to serve society. The project is expected to be completed late in the summer of 2005.

Morris Animal Foundation names executive director

Dr. Patricia N. Olson joined Morris Animal Foundation as executive director on April 19, bringing more than 30 years of diverse experience to the organization.

Dr. Olson replaced Dr. Robert



Dr. Patricia N. Olson

Courtesy of Guide Dogs for the Blind Inc.

Hilseiroth, who retired as executive director after 12 years of service.

Most recently, Dr. Olson served as director of canine health and training

for Guide Dogs for the Blind Inc., in San Rafael, Calif. Prior to her six years there, she held positions with the American Humane Association, University of Minnesota, Colorado State University, Cornell University, and the International Air Transport Association. Dr. Olson founded a clinic in Faribault, Minn., in 1972 and was co-owner until 1977. She is a 1970 graduate of the University of Minnesota.

In 1993-1994, Dr. Olson was president of the American College of Theriogenologists. That same year, she was an AVMA Congressional Science fellow, serving as an adviser to the Senate Veterans' Affairs Committee and working for Sen. John D. Rockefeller of West Virginia. Primarily, Dr. Olson investigated potential causes of Persian Gulf War syndrome and helped organize a hearing that led to legislation providing free medical care for veterans suffering from the syndrome.

Funding Announced

Multi-institutional research funded on Johne's disease, PRRS

Agriculture Secretary Ann M. Veneman announced April 14 that the Department of Agriculture will contribute a total of \$8.8 million to two international research collaboratives working on Johne's disease in cattle, sheep, and goats, and porcine reproductive and respiratory syndrome in swine.

The USDA Cooperative State Research, Education, and Extension Service is funding the critical research, education, and extension activities needed to develop practical applications against Johne's and PRRS. The CSREES named the University of Minnesota as the lead research institution on the grants. The

collaborators include more than a hundred scientists and education experts from two dozen institutions in 20 states, and experts in Canada, Mexico, Spain, Germany, the United Kingdom, and Australia.

Coordinated Agricultural Project, or CAP, grants such as these are targeted to specific agricultural issues and are multidisciplinary and multi-institutional in nature. They were established as part of the National Research Initiative Competitive Grants Program that CSREES administers.

Dr. Vivek Kapur, professor of microbiology at the U of M Medical School and director of the university's Biomedical Genomics Center, will lead the Johnes's project. The research goals include understanding how Johnes's disease is transmitted, developing diagnostic tools to track the disease in herds, studying how Johnes's progresses, and developing a vaccine or methods of boosting herd immunity.

The PRRS project was proposed by the North Central Multi-State Research Committee NC-229, which fosters interaction between researchers at 13 land grant universities. Michael Murtaugh, PhD, a professor at the U of M College of Veterinary Medicine, represents the university in NC-229 and is director of the CAP project. With the grant, NC-229 created a work plan to help industry pursue imaginative solutions to PRRS.

The Web site for the PRRS project is maintained by the National Pork Board at www.porkboard.org/prrs. A Web site for the Johnes's project is being developed and will be located at www.jdip.org.

Fulbright scholarships awarded

Three veterinarians have received Fulbright Scholarships to fund international veterinary research and teaching.

Dr. Michael Collins, a professor at the University of Wisconsin School of Veterinary Medicine, has received a Fulbright Scholarship for 2004-2005 for his work on Johnes's disease. The scholarship will be used to support Dr. Collin's sabbatical in Chile, where he will conduct

research on Johnes's disease and teach graduate students.

Dr. Daniel D. Smeak, a professor of veterinary surgery at The Ohio State University College of Veterinary Medicine, also received a scholarship, to fund his research and lecturing on surgery at the University of Helsinki in Finland this summer.

Dr. Carlos Risco, a professor of large animal clinical sciences at the University of Florida College of Veterinary Medicine, received a three-month Fulbright grant to further his research and teaching on postpartum problems of dairy cows in Argentina.

Abstracts Invited

Research papers invited for CRWAD

The Conference of Research Workers in Animal Diseases has issued a call for abstracts for its annual meeting, which will be held Nov. 14-16, 2004, in Chicago. At the meeting, research scientists from around the world will present their recent findings in oral or poster formats.

Abstracts must be submitted electronically and received by Aug. 14. Information about the meeting as well as abstract submission requirements can be found at www.cvmbs.colostate.edu/microbiology/crwad. Contact Robert P. Ellis, PhD, executive director of Colorado State University's Department of Microbiology, Immunology, and Pathology, College of Veterinary Medicine, for more information at (970) 491-5740 or robert.ellis@colostate.edu.

From the AVMA

Call for AJVR reviewers

Members of the Board of Scientific Reviewers of the *American Journal of Veterinary Research* play a vital role in the peer review of manuscripts submitted for publication and in assisting the editors to maintain the high standards of the journal.

During its September 2004 meeting, the AVMA Council on Research's Committee on the *AJVR* will make appointments to the *AJVR* Board of

Scientific Reviewers. Every year, the committee selects 20 to 25 individuals representing a variety of subject areas to serve on the board.

Readers who wish to be considered for appointment to the *AJVR* Board of Scientific Reviewers should contact Dr. Kurt Matushek at the AVMA office for an application form. Completed application forms must be returned by Aug. 15, 2004. Appointments are for a three-year term; new appointments will become effective Jan. 1, 2005. Individuals appointed to the board will use the AVMA's online system for manuscript peer review.

javma News online

JAVMA examines EPA regulation of pesticide use, OSHA reform bills

Veterinarians prescribing, dispensing, repackaging, applying, or otherwise using pesticide products are subject to the regulations of the Federal Insecticide, Fungicide, and Rodenticide Act, which is administered by the Environmental Protection Agency. A news article in the July 1 issue of *JAVMA*—the first in a four-part series outlining veterinarians' responsibilities under FIFRA—focuses on the rules veterinarians must follow when repackaging pesticides.

In May, the House of Representatives passed four bills designed to improve worker safety by making it easier for employers to work voluntarily with the Occupational Safety and Health Administration to ensure that workplaces are safe. A July 1 *JAVMA* news report describes the OSHA reform bills, which will now be considered by the Senate.

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