

Veterinary Research News

Legislative Actions

Measure would increase veterinarians in public health

Congress has again taken up legislation intended to increase the number of veterinarians working in food safety, food systems, biomedical research, and other public-health related areas of practice.

The Veterinary Public Health Workforce Expansion Act, recently introduced in the House and Senate, would establish a \$1.5 billion competitive federal grants program to build research, diagnostic, and training capacity in the nation's veterinary colleges.

Recent studies show dramatic shortfalls of veterinarians in key public health practice areas such as bioterrorism and emergency preparedness, environmental health, and regulatory medicine, according to the Association of American Veterinary Medical Colleges.

The current national pool of 2,500 new veterinarians graduated annually is not enough to meet the demands of a growing population and the changing public health needs of society, added the AAVMC, which supports the legislation along with the AVMA.

Representative Tammy Baldwin of Wisconsin introduced the House version of the workforce expansion bill (H.R. 1232) Feb. 28; Colorado Sen. Wayne Allard, a veterinarian, introduced the Senate version (S. 746) March 2. A similar measure was considered during the last congressional session, but the measure failed to make it out of committee.

From the AVMA

Former VP Kinnarney wins District III Executive Board seat

Dr. Joseph H. Kinnarney, who served two terms as AVMA vice president, has been elected to represent



Dr. Joseph H. Kinnarney

District III on the AVMA Executive Board from 2007-2013.

A mixed animal practitioner in Reidsville, N.C., Dr. Kinnarney was the only nominee for the board seat in District III. As

provided by the AVMA Bylaws, he was declared elected on Feb. 2.

Also in February, ballots were mailed to AVMA voting members in District V, who will elect their new board member. Drs. Janver Krehbiel of Mason, Mich., and Jeffrey F. Powers of Peck, Mich., are the nominees. District V, currently represented by Dr. James Cook (board chair), comprises Kentucky, Michigan, Ohio, and West Virginia.

At the close of the 2007 annual session of the AVMA House of Delegates in Washington, D.C., in July, Dr. Kinnarney will succeed Dr. Jacky Horner as District III representative. The district comprises Alabama, Mississippi, North Carolina, South Carolina, and Tennessee.

A 1980 graduate of the Cornell University College of Veterinary Medicine, Dr. Kinnarney began his commitment to organized veterinary medicine when he served as president of the AVMA student chapter at Cornell. As president of the national Student AVMA, he represented SAVMA in the AVMA House of Delegates from 1979-1980, before SAVMA had voting rights.

While serving as North Carolina's alternate delegate to the AVMA HOD from 1990-1999, Dr. Kinnarney worked with SAVMA to help win it a vote in the HOD in 1997. His advocacy for students continued with his election to two terms as AVMA vice president from 1999-2001. In that position, he served as AVMA liaison with veterinary students and recent graduates.

Since 2002, Dr. Kinnarney has been North Carolina's delegate to the AVMA HOD; he is being replaced by Dr. Karen L. Davis, North Carolina's alternate delegate. Dr. Kinnarney also has a long history of involvement in his state and local veterinary organizations.

Education council schedules site visits

The AVMA Council on Education has scheduled site visits to schools/colleges of veterinary medicine at seven institutions for the remainder of 2007.

Site visits are planned for North Carolina State University College of Veterinary Medicine, April 1-5; University of Minnesota College of Veterinary Medicine, April 22-26; University of Calgary Faculty of Veterinary Medicine, Canada, June 17-21; University College Dublin Veterinary School, Ireland, Sept. 16-20; Mississippi State University College of Veterinary Medicine, Oct. 7-11; Virginia-Maryland Regional College of Veterinary Medicine, Oct. 20-25; and University of Utrecht Faculty of Veterinary Medicine, the Netherlands, Nov. 4-8.

The council welcomes written comments on these plans or the programs to be evaluated. Comments should be addressed to Dr. Donald G. Simmons, Director, Education and Research Division, AVMA, 1931 N. Meacham Road, Suite 100, Schaumburg, IL 60173-4360. Comments must be signed by the person submitting them to be considered.

Research Results

New method could lead to less aggressive production animals

A new statistical method of determining genetic traits that influence social interactions among animals could provide for more productive livestock.

Robert P. Ellis, PhD, Fort Collins, Colo., executive director.



Dr. S. Wayne Martin

At the CRWAD meeting, the Association for Veterinary Epidemiology and Preventive Medicine named Dr. S. Wayne Martin recipient of the 2006 Calvin W. Schwabe Award. The award is presented annually by the AVEPM to honor lifetime achievement in veterinary epidemiology and preventive medicine.

Dr. Martin is a graduate of the Ontario Veterinary College at the University of Guelph, where he went on to serve on the faculty from 1974 until 2006. He was the founding chair of the Department of Population Medicine.

Dr. Martin served as the secretary and chairman for the International Society of Veterinary Epidemiology and Economics, as well as the Scientific Committee Chairman for the 6th ISVEE conference in Ottawa.

Recipients of the AVEPM student awards were as follows: *Epidemiology and Animal Health Economics category*: J.B. Osterstock, Texas A&M University, for "Heritability estimates and parental effects for paratuberculosis ELISA results in Texas beef cattle"; and Linda Highfield, Texas A&M University, for "The influence of different geostatistical estimation techniques on the simulated spread of foot-and-mouth disease in Southern Texas deer populations." *Food and Environmental Safety category*: V.P. Costantini, The Ohio State University, for "Effect of different swine waste management technologies on detection of animal enteric viruses." *Poster*: E. Brown, South Dakota State University, for "Investigation of European-like porcine circovirus type 2 in the U.S. swine herds."

The American Association of Veterinary Immunologists presented the Distinguished Veterinary Immunologist Award to Mark A. Jutila, PhD. He is a professor in the Department of Veterinary Molecular Biology at Montana State University. Dr. Jutila's research

has led to advances in the understanding of lymphocyte immunology and the mechanisms of lymphocyte trafficking in health and disease.

In addition, Dr. Jutila's work on gamma delta T lymphocytes in the context of host-immune responses and developmental immunology is renowned worldwide.

Recipients of the AAVI student awards were as follows: *First place, oral*: M. de Lima, Federal University of Santa Maria, Brazil, for "Serological marker candidates identified on structural and non-structural proteins of porcine reproductive and respiratory syndrome virus." *Second place, oral*: P.E. Almeida, Michigan State University, for "Signature gene expression of peripheral mononuclear cells and decreased serum DHEA in dairy cows with lameness." *Poster, first place*: M. Rinaldi, University of Milan, Italy, for "Cis-urocanic acid inhibits bovine neutrophil generation of extracellular superoxide." *Poster, second place*: M. Katepalli, University of Kentucky, for "The relationship between telomere length and immune function in peripheral blood mononuclear cells of young and old horses."

The American Association of Veterinary Parasitologists Award was presented to E. Cobo, University of California-Davis, for "Sensitivity and specificity of PCR and culture testing smegma samples for *Tritrichomonas foetus* and *Campylobacter fetus venerealis* in experimentally infected bulls."

Recipients of the NC-1007 Gastroenteric Diseases awards were as follows: *Oral*: P. Malik-Kale, Washington State University, for "Co-culture of *Campylobacter jejuni* with sodium deoxycholate induces virulence gene expression." *Poster*: Mayumi Fukuda, Iowa State University, for "Characterization of a cluster of lipoproteins regulated by CmeR in *Campylobacter jejuni*."

The American College of Veterinary Microbiologists presented Dr. Ian Tizard with its Distinguished Veterinary Microbiologist Award. Dr. Tizard received his BVMS degree from the University of Edinburgh in 1965 and has been a faculty member at Texas A&M Univer-

sity College of Veterinary Medicine & Biomedical Sciences since 1982. He is currently the Richard M. Schubot Professor of Exotic Bird Health.

Dr. Tizard is actively engaged in research ranging from the development of new and improved vaccines for influenza in humans to studies on bacterial diseases in parrots.

Recipients of the ACVM student awards were as follows: H.R. Adams, University of Tennessee, for "Feline lentivirus: Molecular analysis and epidemiology in southern African lions." K.F. Key, Virginia Polytechnic Institute and State University, for "In vivo transfection of pigs with RNA transcripts of infectious cDNA clones of porcine reproductive and respiratory syndrome virus (PRRSV): A novel strategy to study in vivo PRRSV replication and pathogenesis without having to propagate the virus in cell cultures." N. Fittipaldi, Université de Montréal, "Deletion of the *pgdA* gene severely diminishes the virulence of *Streptococcus suis* in a murine model of infection." E. Kabara, Michigan State University, for "Common and strain-specific effects of *Mycobacterium avium* subspecies *paratuberculosis* on bovine monocyte derived macrophages." The Don Kahn Award: E. Behling-Kelly, University of Wisconsin-Madison, for "The roles of myosin light chain kinase and TNF- α in *Haemophilus somnus* mediated paracellular permeability of bovine brain endothelial cell monolayers."

Recipients of the Biosafety and Biosecurity Awards, sponsored by the Animal Health Institute, were as follows: *First place*: M. Ndiva Mongoh, North Dakota State University, for "Characterization of the 2005 anthrax outbreak among animals in North Dakota." *Second place*: A. N. Pitkin, University of Minnesota, "Aerosol transmission of porcine reproductive and respiratory syndrome virus: an application to the field, preliminary data." *Second place*: Summer Loneragan, West Texas A&M University, for "Survey of livestock movements and contacts for the simulation of spread of foot-and-mouth disease in the Texas Panhandle."

Scientists from the United States, the Netherlands, and England designed equations to choose animals that are more congenial in groups. William Muir, PhD, a geneticist at the Purdue University Department of Animal Sciences, said the new method is a tool that could contribute to animal well-being and to securing the world's future food supply—including possibly permitting the domestication of additional species.

The new statistical method allows for the design of selective breeding programs to reduce competitive interactions in livestock. The tool also helps predict how social interactions affect the natural evolution of species.

Dr. Muir and his colleagues wrote about the method and its effectiveness in two papers in the January issue of the journal *Genetics*. In the first paper, the authors explain the tool they developed to determine heritable traits that contribute to interactions among individual animals and groups. The second paper applies the tool to a flock of chickens.

Funding Announced

University of Minnesota receives funds to study swine disease

The Minnesota Rapid Agriculture Response Fund has approved \$300,000 for research at the University of Minnesota to combat porcine circovirus-associated disease in the state.

University researchers identified the urgent need for additional research after PCVAD epizootics occurred in several locations in the United States and caused severe losses in other parts of the world—including Spain, the United Kingdom, and Quebec. Circovirus infection in pigs can lead to poor growth, weight loss, emaciation, and death. In a herd with circovirus infection, fewer than 5 percent of pigs have clinical signs, generally, but morbidity and mortality can reach 40 percent. Most pigs that have signs of the disease do not recover or respond to treatment.

The funding will enable researchers to investigate the epidemiology of porcine circovirus infections in boar

studs and determine the role of non-porcine circovirus factors in causing PCVAD. Researchers will develop objective monitoring procedures—including diagnostic testing and sequencing—using boar stud serum, semen, and blood.

The Minnesota Legislature authorized the creation of the Rapid Agriculture Response Fund as a readily accessible source of assistance to accelerate research supporting the state's agricultural industry.

Abstracts Invited

Bovine practitioners solicit abstracts

The American Association of Bovine Practitioners seeks project presentations for the oral and scientific poster sessions at its annual meeting from Sept. 20-22 in Vancouver, British Columbia.

The deadline for abstracts is May 15. After May 15, the AABP will consider abstracts only for the poster session, and late abstracts will not appear in the proceedings.

Drs. Jim Floyd at james_floyd@ncsu.edu or Ann Godkin at ann.godkin@ontario.ca can answer questions. An electronic submission form is available online at www.aabp.org, under Conference.

Grant Proposals Invited

AALAS Foundation requests proposals

The Foundation of the American Association for Laboratory Animal Science is requesting grant proposals for an education/outreach program that enhances awareness and understanding of animal welfare and care in laboratory settings or promotes the necessity and benefits of using animals as part of biomedical research.

Proposals must be received by April 15 to be considered during the foundation's June 10 board meeting. Proposals to be considered during the board's Oct. 13 meeting must be received by Sept. 15.

Any group with the resources and staffing to develop, implement, and successfully complete its proposed

goal is encouraged to submit an application. Information about submission procedures is posted at <http://foundation.aalas.org> under Grants. For additional information on the AALAS Foundation, contact John McCutchen, AALAS Foundation staff liaison, at (901) 754-8620 or john.mccutchen@aalas.org.

The Veterinary Community

CRWAD honors Carmichael



Dr. Leland E. "Skip" Carmichael

Approximately 525 people attended the 87th annual meeting of the Conference of Research Workers in Animal Diseases, Dec. 3-5, 2006, in Chicago. The conference was dedicated to Dr. Leland

E. "Skip" Carmichael of Ithaca, N.Y.

After earning his DVM degree from the University of California-Davis in 1956, Dr. Carmichael went to work for the Veterinary Virus Research Institute—now the James A. Baker Institute for Animal Health at the Cornell University College of Veterinary Medicine. Dr. Carmichael has since retired.

A diplomate of the American College of Veterinary Microbiologists, Dr. Carmichael is credited with identifying canine herpesvirus, brucellosis in dogs, and canine parvovirus. He also helped develop the first vaccine for canine parvovirus.

During the 1960s, Dr. Carmichael established a laboratory for the production of a vaccine for rinderpest virus in the Republic of Mali in West Africa. In that decade, he was appointed to an endowed professorship in virology at the Baker Institute, where he served as acting director in the 1970s and again in the 1990s.

Life membership was awarded to Drs. Margaret Ewing, Stillwater, Okla.; Sidney Ewing, Stillwater, Okla.; Phillip O'Berry, Ames, Iowa; Richard Ross, Ames, Iowa; and Kim Wise, Columbia, Mo.

Officers of CRWAD for 2007 are Lynn A. Joens, PhD, Tucson, Ariz., *president*; Dr. Richard E. Isaacson, St. Paul, Minn., *vice president*; and