



# Veterinary Research News

## Academia

### Academic leaders ponder effective teaching models

Some sacred cows of veterinary education were on the chopping block during discussions at the North American Veterinary Medical Education Consortium's April 29-May 1 meeting in Kansas City, Mo., hosted by the Association of American Veterinary Medical Colleges.

Participants were asked to deconstruct and reconstruct nine veterinary education models. Their mission was to analyze and create new and improved models, using projected future societal needs and the veterinary competencies needed to fulfill those needs as a guide. Ideas developed in the breakout groups will be shared in the near future at [www.navmec.org](http://www.navmec.org).

Before the discussions, nearly two dozen speakers gave presentations on ideas for revamping veterinary education to inspire participants in their discussions, touching on everything from online instruction to outcomes assessment.

Digital technology was cited by many speakers as deserving a greater presence in classrooms at veterinary schools and colleges. They said blending online tools and activities with class time allows the learning process to become more engaging and autonomous for students, and it accommodates various learning styles while increasing active learning strategies within the class.

Dr. Jeannette McDonald, director of the Technology for Learning Center at the University of Wisconsin-Madison School of Veterinary Medicine, spoke about one such program—the Veterinary Internet Course Exchange.

VetICE is a cooperative—open to all AAVMC member institutions—that will provide students access to quality, Internet-based learning materials and courses in a variety of animal health disciplines. So far, six veterinary schools and colleges have signed on. VetICE's steering committee is in the process of developing pilot test courses and asking more schools to

join as well as finalizing its business plan.

Another popular topic at the meeting was shifting emphasis away from having students memorizing basic science facts toward teaching students how to operate in the real world.

Kathleen A. Bonvicini, PhD, of the Institute for Healthcare Communication quoted a study by the Joint Commission on Medicine that looked at root causes for medical errors in human medicine. Sixty-six percent of these mistakes were found to stem from a lack of effective communication among members of the health care team. The same study also found that up to three-fourths of litigation in human medicine resulted from breakdowns in communication.

To help educate students in this area, the Institute for Healthcare Communication started the Communication Project with Bayer Animal Health. The institute created 13 modules to help veterinary students communicate with colleagues in practice and work with people from various backgrounds.

One important driver for curricular change in veterinary education mentioned by Dr. Jennifer L. Hodgson, associate dean for professional programs at the Virginia-Maryland College of Veterinary Medicine, was outcomes assessment.

The Royal College of Veterinary Surgeons has taken the lead in this area by defining the essential competencies required of British veterinary practitioners in two parts: on graduation, called "day-one competencies," and after a year of further professional experience in particular areas of practice, called "year-one competencies." They can be found by visiting [www.rcvs.org.uk](http://www.rcvs.org.uk) and clicking on the links "Veterinary Surgeons" and "Education."

### New federal regulations affect accreditors

Federal regulatory changes by the Department of Education, which go into effect July 1, are having an impact

on how accrediting bodies, including the AVMA Council on Education, conduct business.

Congress renewed the Higher Education Opportunities Act in August 2008. However, two rounds of negotiated rule making ensued, and the USDE didn't issue its initial guidance on, and interpretations of, its new regulations until January 2009, with a deadline of July 1, 2010, for implementation.

In late May, the council examined and revised its Accreditation Policies and Procedures manual in eight areas to comply with new language introduced during reauthorization of the act. Amendments to the manual were made with the assistance of AVMA staff and input from an attorney who specializes in accreditation law. The changes became effective immediately.

Some of the changes were substantive—such as modifications to the appeals process—whereas others merely added clarity and consistency to policy wording. The new policy wording can be found at [www.avma.org/education/cvea/coe\\_pp.asp](http://www.avma.org/education/cvea/coe_pp.asp).

Among the most important changes are that now, in the event of an adverse accreditation decision, the council will provide the public with a summary of reasons for the decision in conjunction with official comments from the program or, at least, evidence that the program was given an opportunity by the COE to comment.

Accrediting bodies are also being asked to monitor institutions' growth on an annual basis, afford greater due process to institutions being evaluated for accreditation, adjust the way an appeals panel is formed, and give the appeals panel greater authority.

The council's amended policies and procedures will be applied to foreign and domestic schools across the board, in keeping with the requirements for continued recognition by the USDE and Council for Higher Education Accreditation.

Dr. Laurie A. Jaeger, COE chair, said this includes the council's earlier

accreditation decision regarding the Universidad Nacional Autonoma de México Facultad de Medicina Veterinaria y Zootecnia and the subsequent appeal filed by the school in March.

In accordance with the changes made to comply with USDE guidelines, the council was required to vacate its earlier decision so that UNAM could respond in writing to each deficiency noted in the report of evaluation prior to the accreditation decision. The council will consider the anticipated response from UNAM at its next meeting, Sept. 19-21 at AVMA headquarters.

### **New curriculum to train students, scientists on regulatory affairs**

Food and Drug Administration employees who are hired on the basis of their scientific credentials frequently need years of instruction on the legal and political components of regulatory agencies, Dr. Stephen F. Sundlof said.

"When we bring in people, it often takes them three years or more before they are able to optimally function in a complex regulatory environment, and anything we can do to reduce that time is money in the bank for the agency," he said.

The visiting professor, who in May stepped down as director of the FDA's Center for Food Safety and Applied Nutrition, is among faculty of the Center for Public and Corporate Veterinary Medicine at the Virginia-Maryland Regional College of Veterinary Medicine who are working with veterinary colleges at The Ohio State University and the University of Minnesota to develop a program that they expect will help current and future government scientists develop the skills needed for work in regulatory agencies.

The program's target audience is government employees interested in career development, recent doctoral graduates preparing for government careers, and veterinary students who want additional training in corporate or public practice.

Dr. Valerie E. Ragan, director of the center, said the new program, while still in a conceptual stage, is expected to allow participants to gain additional training in scientific and nonscientific areas and, potentially, a master's in regulatory science. She said the curriculum also could be useful for veterinarians in private practice who have clinical backgrounds and want a career change.

Dr. Sundlof said regulatory agencies need new employees to keep up with scientific advances and rapidly changing subjects.

### **Payout to former UC-Davis students in limbo**

More than a hundred University of California-Davis School of Veterinary Medicine alumni are still waiting to hear whether they will receive a refund from the university.

San Francisco Superior Court Judge John Munter ruled March 11 that the University of California needs to pay \$38 million in refunds and interest to former students who entered the university's professional schools in fall 2003, according to news reports. The ruling could potentially impact about 2,900 ex-students, of whom 120 are veterinary school graduates.

Prosecutors for the class action lawsuit, filed in 2007, had successfully argued that these students' fees were raised thousands of dollars despite the university's pledge to keep them unchanged.

The judge said the university made that promise in official fee guides on its website starting in 1994. UC told incoming students that the extra fee they paid to attend a professional school would remain unchanged until they graduated, and that fees would be increased only for new students.

That statement was removed Aug. 25, 2003. Over the next three years, UC increased professional school fees by thousands of dollars and billed those amounts to continuing students as well as new students.

"We do believe the court made errors in the decision, and the university believes we never made any promise to these students that the fees would stay the same while enrolled in their professional programs," said Ricardo Vazquez, spokesman for the UC Office of the President. "The statements made in some fee guides from a previous year applied only to that year."

The university is now "seriously looking" into an appeal, Vazquez said. However, if the ruling stands, it could be a costly blow to UC, which has indicated it may further increase fees or reduce programs to bear the cost.

Current veterinary students will already see a 15 percent increase in systemwide fees and a 7 percent increase in the veterinary medicine professional degree fee starting this 2010-2011 academic year, bringing the total cost for a California resident

attending the UC-Davis veterinary school to \$30,245, according to the university.

### **Wisconsin professor suspended for unauthorized research**

A University of Wisconsin-Madison School of Veterinary Medicine professor was sanctioned after officials determined unauthorized recombinant DNA research with select agents had been conducted in the laboratory he oversaw.

Following a series of investigations spanning more than a year and a half, the university concluded Dr. Gary A. Splitter either knew of, or participated in, restricted research encoding antibiotic-resistant genes into *Brucella melitensis*, a bacterium the government considers a serious threat to human and animal health.

University Provost Paul M. DeLuca Jr. wrote Dr. Splitter on Jan. 29, 2010, informing the professor of animal health and biomedical sciences that his laboratory and research privileges had been revoked for five years. The suspension was effective retroactive to Dec. 12, 2008, when Dr. Splitter's access to his biosafety level 3 laboratory was restricted.

Dr. Splitter's misconduct resulted in the University of Wisconsin-Madison paying a \$40,000 fine to the Department of Health and Human Services to settle alleged violations of select agents regulations.

A member of the UW faculty for nearly 32 years, Dr. Splitter can continue teaching and participating in research but in limited ways, such as analyzing data and reviewing and writing papers.

The existence of the modified bacterial strains came to light during a routine inspection of UW's select agents program by the Centers for Disease Control and Prevention in August 2007.

William S. Mellon, PhD, associate dean for research policy, said Dr. Splitter's laboratory had produced, without university or government approval, strains of *Brucella* encoded with antibiotic-resistant markers for spectinomycin and trimethoprim.

By January 2008 the university had closed the laboratory, an investigation of Dr. Splitter had commenced, and the bacteria were destroyed.

No one at the UW laboratory was infected with the altered strains.

Throughout his career, Dr. Splitter has extensively researched *Brucella*, and his articles have appeared in such publications as the Journal

of Bacteriology, Science, and the Journal of Biological Chemistry.

Dr. Splitter said he knew a graduate student had introduced a spectinomycin-resistant gene to the bacteria, and another graduate student and a postdoctoral researcher were working with the strain. But because the antimicrobial isn't used in the treatment of brucellosis, the research is not restricted research, according to Dr. Splitter.

It wasn't until the CDC inspection that he learned the gene used to create the spectinomycin resistance also confers cross-resistance to streptomycin, which is used to treat brucellosis.

Dr. Splitter faulted the university's Institutional Biosafety Committee protocol policy for not requiring details about every recombinant DNA construct.

As for the trimethoprim-resistant *Brucella*, Dr. Splitter says a postdoctoral researcher who is no longer at the university created the strain, which has been destroyed.

In his letter, the provost said Dr. Splitter's explanation "lacked credibility." Even if it were a case of freelancing students, the university maintains it was Dr. Splitter's responsibility to know what was happening in his laboratory, especially with research involving select agents.

The grad students and postdoctoral researcher were interviewed, but university officials found them not to be at fault, according to Dr. Mellon.

The university has since required principal investigators participating in UW's select agents program to attend meetings reviewing biosafety protocols.

Dr. Splitter chose not to appeal the provost's decision, citing the expenses associated with such an effort.

### **Organizations to promote veterinary research careers**

The Center for Public and Corporate Veterinary Medicine in May announced a partnership with the American Association of Veterinary Laboratory Diagnosticians to create opportunities for veterinary students seeking careers in laboratory investigations and animal disease surveillance.

Earlier this year, the CPCVM and U.S. Animal Health Association committed to working together to educate veterinary students about jobs in public health, food animal medicine, and other nontraditional career fields.

The CPCVM, which is part of the Virginia-Maryland Regional College of Veterinary Medicine, and the AAVLD

are developing a framework for attracting more veterinarians to an area suffering a serious workforce shortage. Center Director Valerie E. Ragan says the plan will incorporate mentorship and networking opportunities as well as externships.

"Many of our students are interested in research, and this will be a good opportunity for them to gain knowledge and have access to those with expertise in the laboratory side of veterinary medicine," Dr. Ragan said.

Dr. Ragan also expects the center will keep AAVLD members apprised of veterinary students willing to assist the laboratories with projects or as part of a summer job. She expects the plan will be ready in time for the fall semester.

"This is a great step in working towards addressing the current growing shortage of veterinarians in the areas of diagnostic medicine and research," said Dr. Gary A. Anderson, AAVLD president and director of the Kansas State Veterinary Diagnostic Laboratory."

For more information on the program, contact Dr. Ragan at (301) 314-6820 or [vragan@umd.edu](mailto:vragan@umd.edu) or Dr. Anderson at (785) 532-4454 or [ganders@vet.k-state.edu](mailto:ganders@vet.k-state.edu).

## **Business World**

### **Recession leads to decrease in revenues at many specialty practices**

Before the recession, many specialty practices had been booming as a growing subset of pet owners spared no expense on veterinary care. Recently, however, specialty practices appear to have fared worse on average than general practices.

In California, for example, revenues decreased 4.13 percent from 2008 to 2009 for specialty and emergency practices, according to figures from the veterinary consulting firm Gatto McFerson in Santa Monica. At the same time, revenues increased slightly for general practices in the state.

Tom A. McFerson, a partner at Gatto McFerson, believes specialty practices are losing revenue for a couple of reasons. Most obviously, specialty and emergency procedures are big-ticket items that some clients cannot afford at the moment. In addition, some general practices are not referring as many cases and are handling emergencies themselves.

Gatto McFerson started compiling information about revenues at California veterinary practices during the initial economic meltdown in the

fall of 2008. The informal survey has grown to encompass data from more than 150 practices.

After factoring out price increases, general and specialty practices in the state actually reported decreases in revenues from 2008 to 2009—although the specialty practices still fared worse. General practices in Southern California had an overall decrease in revenue of 1.66 percent, after accounting for price increases, and general practices in Northern California had a decrease of 1.05 percent. Specialty practices throughout the state had a decrease in revenues of 7.31 percent after accounting for price increases.

By the early months of 2010, though, revenues appeared to be stabilizing for general and specialty practices in the survey.

Members of the national Veterinary Specialty Practice Alliance have felt the effects of the recession, said Leah Basinai, VSPA president and chief operations officer for the Veterinary Medical and Surgical Group out of Ventura, Calif. The alliance of 20 specialty practices meets twice a year to compare finances and discuss business models. The members operate in markets that do not overlap, so they are not competitors.

In 2008, Basinai said, some VSPA members began to see decreases in revenue. The alliance is still analyzing data for 2009, but Basinai believes decreases in revenue were more substantial for 2009 than 2008.

In response to the economic downturn, VSPA members have adjusted staffing and taken a variety of other measures. They have been paying closer attention to inventory management, seeking new bids for medical supplies and fee reductions for credit-card processing, and renegotiating interest rates on leases and loans.

Some of the members of MOON, a new collaborative organization of specialty practices, also have experienced a slowdown because of the recession, said Dr. Brian D. Cassell, MOON executive director and a former consultant for specialty practices. The name MOON came from the descriptive phrase Member-Owned Organizational Network; the previous name was the Veterinary Specialty Practice Collaboration Initiative.

Before the recession, Dr. Cassell said, specialty practices were adding services and had waged a bidding war for veterinary specialists. Now, some specialty practices have had layoffs,



while others are seeing more applicants for open positions.

Yet, Dr. Cassell believes the economy has stabilized and could improve incrementally in the next one to three years. He said pet owners are still looking for high-level veterinary care when they have income to spare.

## Regulations

### Extralabel drug substitution runs afoul of law

Extralabel use of drugs can give veterinarians effective options in treating patients, but there are limitations veterinarians should be aware of when considering extralabel drug use.

Guidelines set out in the Animal Medicinal Drug Use Clarification Act impose certain restrictions on veterinarians who prescribe approved human and animal drugs for use in ways other than stated on the label.

The AVMA was recently made aware of questions from veterinarians about treating patients with a drug labeled for use in another species, instead of using a similar drug labeled for use in that species.

Specifically, equine practitioners have been inquiring about the legality of treating horses with Previcox (firocoxib), a nonsteroidal anti-inflammatory drug labeled for use in dogs, instead of Equioxx, which contains the same ingredient but is labeled for use in horses. Both are manufactured by Merial. Horse owners are requesting Previcox over Equioxx because of the substantial cost difference between the two products.

According to AMDUCA, however, because Equioxx is labeled for use in horses, the canine product cannot legally be used in an extralabel fashion in horses.

Selecting a canine product over an equine product for any nonmedical reason, including economics, is not acceptable. It is only when an approved equine product has been determined by the attending veterinarian to be clinically ineffective for the labeled use that the veterinarian can use another animal-approved drug in an extralabel manner.

Economic concerns are a valid reason to use or prescribe a drug in an extralabel manner only in that a veterinarian can select an approved human drug to relieve pain and suffering in a nonfood animal even when an identical approved animal drug is available.

The overarching premise of AMDUCA is that extralabel use is acceptable when filling a medical need for an animal whose health is threatened. Practitioners who deviate from extralabel use guidelines set out in AMDUCA risk becoming the target of unfavorable actions by the Food and Drug Administration.

For more information, visit [www.avma.org/reference/amduca/extralabel\\_brochure.pdf](http://www.avma.org/reference/amduca/extralabel_brochure.pdf).

## Invitations

### Zoo association compiles volunteer database for oil spill relief

The American Association of Zoo Veterinarians has established a database of volunteers willing to support relief efforts mitigating the Gulf of Mexico oil spill.

The database contains information about each registrant and will enable agencies involved in the cleanup to recruit people according to their expertise, availability, and so on. Registrants are encouraged to provide as much information as possible to make the database useful.

Registrants do not need to be veterinarians to register, and there is no fee for signing up.

Information contained in the database is made available only to agencies involved in the cleanup and only when requested by them. Not every registrant will be called on to volunteer.

For more information, visit the AAZV website, [www.aazv.org](http://www.aazv.org); e-mail questions to [aazvorg@aol.com](mailto:aazvorg@aol.com) or call (904) 225-3275.

## Funding Announced

### Consortium to study cancer in dogs

Two private institutes have created the Canine Hereditary Cancer Consortium to study cancer in dogs.

The Translational Genomics Research Institute in Phoenix and Van Andel Research Institute in Grand Rapids, Mich., are partnering on the project with the National Cancer Institute, University of Pennsylvania, and Michigan State University.

Most of the funding comes from a \$4.3 million grant for cancer research through the American Recovery and Reinvestment Act. Hill's Pet Nutrition and PetSmart each contributed \$500,000.

The consortium will collect saliva, blood, and tumor samples from dogs with the consent of own-

ers. The goal is to identify genes that influence cancers in dogs and humans.

The Van Andel Research Institute already had been studying hemangiosarcoma in Clumber Spaniels with support from the American Kennel Club Canine Health Foundation and Clumber Spaniel Health Foundation. Now the program will expand to the study of osteosarcoma, oral melanoma, malignant histiocytosis, and non-Hodgkin's lymphoma and as many as 20 breeds of dogs.

A relevant but separate consortium was formed several years ago to study cancer in dogs. The Canine Comparative Oncology and Genomics Consortium is collecting tumor samples from dogs for a central repository at the National Cancer Institute. A number of veterinary colleges are participating in the project.

## From the AVMA

### CVTEA-accredited programs total 169

The AVMA Committee on Veterinary Technician Education and Activities accredited four new veterinary technology programs at its April 16-18 meeting in Schaumburg, Ill.

The four programs granted provisional accreditation were Globe University, Eau Claire, Wis.; Brown Mackie College, Findlay, Ohio; Minnesota School of Business, Moorhead, Minn.; and Globe University, Sioux Falls, S.D.

In addition, five programs were moved from provisional to full accreditation, and two programs were placed on probationary accreditation, which is a status assigned to a program that has specific deficiencies in one or more standards that affect student outcomes or safety.

The CVTEA has now accredited 169 programs in total. Twenty of those offer a four-year degree, and nine offer distance-learning opportunities. Alaska, Hawaii, Montana, and Rhode Island are the only states, along with the District of Columbia, that do not have AVMA-accredited veterinary technology programs.

The CVTEA has 37 site visits scheduled this year and 52 tentatively scheduled for 2011.

The committee's newly elected chair for 2010-2011 is Rachel A. Valentine, RVT. She is a veterinary technology instructor at Tulsa Community College in Oklahoma who served as CVTEA's vice chair for the previous two years. 🇺🇸