

## Letters to the Editor

### Concerned with welfare of dogs in research

I found the article "Effect of vaccination on experimental infection with *Bordetella bronchiseptica* in dogs" (JAVMA, Feb 1, 2001, pp 367–375) to be impressive but most disturbing.

The work that went into the article was meticulous and thorough. The charts and statistical equations were extraordinary. The photomicrographs were clear and readable. It was all very impressive...but to what end?

Twenty-five young healthy dogs were "humanely sacrificed" in the wake of this study! Why? Could this study have been performed some other way? Indeed yes! Is the magnitude of this disease such that we needed this study? Certainly not! This disease is generally regarded as being mild and self-limiting. I suppose that some of the vaccine manufacturers in support of this project will respond with rhetoric pertaining to the economic impact of *Bordetella bronchiseptica* infection.

I am not a member of, nor do I support, any of the animal rights groups. But after 20 years in practice, I say that no animal should be put to death for the sake of kennel cough research.

Philip Field, DVM  
San Diego, Calif

### The authors respond:

We wholeheartedly agree with Dr. Field's sentiments concerning the judicious use of animals in studies pertaining to vaccine efficacy and other clinical research in veterinary medicine. In our recently published study on *Bordetella bronchiseptica* vaccines, as well as in other studies, we have always done our best to use as few animals as possible to yield significant results and to learn as much as we

can from our experimental subjects.

As stated in our article, the primary objective of our study was to clinically examine and provide data relevant to testing the hypothesis that administering both intranasal and intramuscular vaccines may provide superior immunity.<sup>1</sup> We strongly believe that changes in vaccine protocols (and therapeutic regimens) should be based on data, and not simply recommendations from experts in the field with unsubstantiated theories. As detailed in our article, there were measurable and significant histologic lesions, which were associated with clinical findings, in the upper and lower airways of the puppies. However, since we did not observe any gross pathologic lesions in any of the puppies (in replicate 1) and since differences in clinical responses were pronounced, we decided, for humanitarian reasons alone, to deviate from the protocol and forego pathologic examination of the second replicate of puppies. The 25 puppies in the second replicate were readily adopted into private homes, and in fact, some of our group were among the adopters. We feel we learned a lot from this study, including the fact that this model could be used in future studies without the necessity of euthanizing additional dogs to see dramatic differences in responses to *B bronchiseptica* vaccines.

To our knowledge, the economic impact of *B bronchiseptica* infection is not known. We would agree with Dr. Field that in many dogs kennel cough caused by *B bronchiseptica* infection is a mild and self-limiting disease; however, this is not always the case. In fact, the source of the challenge isolate we used was a puppy that died of severe suppurative bronchopneumonia caused by a primary *B bronchiseptica* infection. In addition, we know of other situations in dog kennels and breeding establishments where the infection has been associated with quite severe disease. There are reports in the literature to this effect as well.<sup>2-5</sup> So perhaps kennel cough should not always be regarded as being mild and self-limiting, without the need for diagnosis and therapeutic intervention.

Again, we certainly concur with Dr. Field's admirable concerns about the welfare and judicious use of animals in research, whether they be dogs or laboratory rodents. Unfortunately, our profession, in contrast to human medicine, does not currently have the apparatus for infectious disease reporting in companion animals (dogs and cats) nor the resources to conduct large-scale epidemiologic studies to assess vaccine efficacy on a population basis. Therefore, if we are to make continuing progress in vaccine development and evaluate vaccine performance in veterinary medicine, challenge of immunity

Readers are invited to submit letters to the editor. Letters should not exceed 500 words. All letters are subject to editing. Those pertaining to anything published in the JAVMA should be received within one month of the date of publication. Submission via fax or e-mail (847/925-1329; [journalsletters@avma.org](mailto:journalsletters@avma.org)) is encouraged; authors should give their daytime telephone number, fax number, and e-mail address.

Letters containing defamatory, libelous, or malicious statements will not be published, nor will letters representing attacks on or attempts to demean veterinary societies, their committees or agencies, or persons serving on such committees or agencies. Viewpoints expressed in published letters are those of the letter writers and do not necessarily represent the opinions or policies of the AVMA.

studies will still have to be done for this and other important infectious diseases.

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### Thoughts on educational models

I agree with Dr Jöchle's comments in his letter to the editor (*JAVMA*, Feb 15, 2001, pp 505–506).

After 30 years in academia, 20 years of which I was a hospital director in two veterinary colleges, I have to say I was and still am quite devoted to the teaching hospital system. However, it is not the only way to go. It certainly has been labeled a bottomless pit for hard-to-come-by teaching funds. So maybe we should try a fresh alternative now being offered by Western University's Dean Shirley Johnston.

I agree with Dr. Jöchle that the Council on Education ought to enable Dean Johnston to have the freedom to develop her paradigm for clinical education. I do not consider this a big risk. After all, she is involving some of the finest veterinary practitioners in this endeavor, and I'll wager they do not embrace failure.

William M. Adams, VMD, DACT  
Albion, Pa

In his letter to the editor (*JAVMA*, Feb 15, 2001, pp 505–506), Dr. Wolfgang Jöchle draws a disturbing distinction between veterinary scientists and veterinary doctors. He believes that North America's big academic animal hospitals (he likens them to cathedrals), with their affiliated departments, facilities, and research components, are designed to produce veterinary scientists, whereas veterinary doctors can be educated appropriately at less cost in the parishes, presumably in private practices. This astonishingly atavistic point of view implies that veterinary practitioners, as opposed to veterinary researchers, don't require the rigorous science-based clinical training that only a university hospital—a place for the integration of teaching, research, and patient care—can provide. Even as far back as 1900, James Law, the greatest veterinary educator of his day, understood that “[each] graduate must have such training in scientific thought and method as will raise him above the level of empirical practice and will give him a substantial basis for scientific thought.” In the hundred years since Law uttered those words, North American veterinary schools have struggled to overcome their vocational moorings, gradually lifting themselves into the milieu of medical education oriented toward science and clinical specialization. This desirable transformation would not have been possible in the absence of university-based veterinary hospitals where, during their formative years, students learn to find and use information and acquire the analytical skills, proper values, and critical capacity they will need for the practice of 21st century veterinary medicine. In this era of revolutionary progress in biology and medicine, as the genomes of domestic animals and other species are sequenced, as we learn to define how protein structure correlates with function, as computational biology becomes increasing important in the management of massive data banks, and especially as the fruits of research in molecular biology reach the clinical realm, university-based veterinary hospitals

will continue to play an essential role in the education of veterinary doctors. The parishes can augment but cannot substitute for the cathedral in the education of veterinary students; only in the full-service teaching hospital, with its concentration of talent, including veterinarian-scientists, complex case material, seminars, conferences, pathology rounds and laboratory support services, peer interactions, and research opportunities, in a setting free from the daily business pressures of private practice, can the students' intellectual development, a veterinary doctor's most important asset, be fully realized. Perhaps Dr. Jöchle believes that because the practice of veterinary medicine is an art, based on a clinician's judgment and good sense, the kind of rigorous science-based clinical training students receive in university veterinary hospitals is unnecessary, excessive, or too costly, justifying a return to a vocationally oriented mode of veterinary education (ie, to educating our students in the parishes). Perhaps he should consider the very simple possibility that the high quality of a veterinary school's clinical program is necessarily related to its high cost.

Robert R. Marshak, DVM  
New York, NY

### Dr. Jöchle responds:

Dr. Marshak appears to have drawn the mistaken conclusion that my distinction of veterinary scientists, the products of the cathedral, and veterinary doctors (clinicians), educated in the parishes, implies a lack of scientific rigor in the education of the latter. Nothing could be further from the truth. I am not harboring an atavistic viewpoint nor did I promote a vocationally oriented mode of veterinary education. Where we differ in opinion is in how scientific rigor in veterinary educations may be attained and rooted firmly in the student's mind.

I don't believe Dr. Marshak's assertion that students cannot learn to find and use information and acquire analytical skills, proper values, and critical capacity outside of the university-based veterinary teaching hospital. This view belies

the great success of practicing veterinarians in the United States today and asserts that complex case materials, seminars, conferences, pathology rounds, laboratory support services, peer interactions, and research opportunities cannot be found in private practice, even though they exist in Southern California and elsewhere today.

The model, as described by the College of Veterinary Medicine at Western University of Health Sciences, is based in part on human medical education. It calls for a rigorous university-based curriculum with faculty and research standards. As explained by Dean Shirley Johnston, the first student clinical experiences will occur in years one and two of the curriculum in a university-based small animal hospital and at animal facilities at California Polytechnic University in Pomona. About two-thirds of the third-year curriculum will be required rotations in large high-quality area practices under the direction of campus-based faculty and clinical site coordinators. Some of these practices have over 20 veterinarians and are actively involved in teaching and research. Their caseloads and sophistication rival or exceed those of university-based veterinary teaching hospitals. This caseload may differ from that of classical teaching hospitals as students will see not only referrals but front-line patients of any kind, as they will do in private practice.

Neither the cathedral nor the parish has a monopoly on enlightenment or the perfect model for veterinary education. Perhaps, as an inclusive profession, we should embrace both. The view that only a university-based teaching hospital can provide for the integration of teaching, research, and patient care has long been outdated nationally and internationally. These hospitals play an important and perhaps even an essential role in veterinary education. Let's have the courage and wisdom to consider another model.

Machiavelli writes:

...And it ought to be remembered that there is nothing more difficult to bring to hand more perilous to conduct or more uncertain in its success, than to take the lead in the

introduction of a new order of things. Because the innovator has for enemies all those who have done well under the old conditions and lukewarm defenders in those who may do well under the new.

Being neither a stakeholder in the old order nor likely to personally do well under the new, I hope I am more than just a lukewarm defender.

Wolfgang Jöchle, DVM, DrMedVet, DACT  
Denville, NJ

### Another call for diversity in the profession

Dr. James R. Coffman's comments on welcoming diversity (*JAVMA* Mar 1, 2001, p 658) express a hopeful view.

Can we summon union from diversity? Can we summon opportunity? Can we celebrate what we have in common while recognizing diversity? Can we work to expand our common ground—our humanness, our professionalism, and our desire to help animals?

Let's not twiddle our thumbs while waiting for diversity to break out. We have our work cut out for us.

Kenneth B. Haas, DVM  
Kalamazoo, Mich

### Concerned about the high cost of veterinary treatments

I would like to thank Dr. Terry Mills for the letter in Mar 1, 2001 *JAVMA* (p 666). Also, thanks to Dr. Robert Burns for his response. I, too, am one of those old semi-retired veterinarians.

Some of these concerns about the high costs of treatment may be somewhat self-imposed. For 40 years I have observed, absorbed, and practiced to the best of my ability all the tremendous advances that have occurred in veterinary medicine. Maybe we have taken all this for granted and falsely assumed that the client will do whatever we dictate and pay for it. Some will argue that the answer is in third party payment. Unfortunately, the people that need it the most can't afford it. It becomes another drain on their disposable income.

I think it is arrogant and insen-

sitive behavior to not include the client in all aspects of a case. Always present the very best protocol possible. If the client can't afford it you may be able to compromise. Some may view this as poor medicine, but if you can make the pet comfortable with affordable treatment and the client is satisfied, it is better than the alternative. Keep in mind we are not dealing with species that have 70- or 80-year life spans.

Since retiring from active practice I do a fair amount of relief work, almost all for younger practitioners. I am often in awe of their medical knowledge but often surprised at their difficulty in applying it. Have we become so self-absorbed with all this knowledge that we have failed to learn how to use it in a manner that pet owners can afford?

I, like Dr. Burns, do not have the answers, as it is a many faceted problem. At the risk of sounding like an old guy that time has passed by, I would like to believe we can preserve some of the "James Herriot" image.

R. D. Royse, DVM  
Wichita, Kan

### Supports returning "star" to veterinary corps

I believe Dr. Thompson failed to make a case against restoring flag rank to the US Army Veterinary Corps in his letter to the editor (*JAVMA*, Mar 1, 2001, p 667). Restoration of flag rank (the "star") to the veterinary corps is vitally important to establish some semblance of parity between the various services in the US Army Medical Department. Most other services (eg, US Army Nurse Corps, Dental Corps, Medical Service Corps) have a general officer as their chief. If the voice of veterinary medicine is to be heard in the highest echelons of the US Army, it is essential that the veterinary corps be accorded the respect and stature that comes with general officer rank.

Ours is a small profession and the veterinary corps is an important part of it. Those individuals who choose to spend their professional lives in the military merit

our thanks rather than our unwarranted criticism.

*Richard H. McCormick, DVM  
Miami, Fla*

### **Association disagrees with euthanasia method for avian species**

The Association of Avian Veterinarians (AAV) would like to respond to the AVMA Euthanasia Panel Report (*JAVMA*, Mar 1, 2001, pp 669–696).

According to the report, the AVMA Executive Board approved thoracic compression as a conditionally acceptable method of euthanizing avian species. Akin to suffocation of mammals, this method cannot be considered humane.

We recognize that this has

been an accepted field method in the past, but times change, as does professional, ethical, moral, and humane responsibility.

The Board of Directors of the AAV discussed this issue and does not find that thoracic compression is an acceptable procedure. We recommend and encourage it be deleted this from future AVMA euthanasia guidelines. Barbiturate overdose is the preferred method of euthanasia, as it is in many other animal species. In field conditions, where this is not feasible, cervical disarticulation would be an alternative method. The latter method is approved by the US Fish and Wildlife Service and is recommended by the AAV Board of Directors.

*R. Avery Bennett, DVM  
Boca Raton, Fla*

Merial disclaimer



## **Addendum: Updated Convention Information**

The program for the American Veterinary Medical History Society annual meeting in conjunction with the AVMA Annual Convention (July 14-18, 2001 in Boston) was inadvertently omitted from the March 15, 2001 Preconvention Issue of the *JAVMA*. Below is a listing of the program.

### **American Veterinary Medical History Society (Hilton)**

#### **Tuesday, July 17**

- 1:00p      Veterinary History Program: Opening remarks  
*Presiding officer: Susan D. Jones*
- 1:10p      The World Association for the History of Veterinary  
Medicine: Report on the 2000 Annual Meeting—  
*Susan D. Jones*
- 1:30p      Same Bed, Different Dreams: Veterinary Medicine and  
Animal Welfare in the Late Nineteenth Century—  
*Franklin Loew*
- 2:00p      Feline Fortunes: Contrasting Perceptions of Cats—  
*Elizabeth Atwood Lawrence*
- 2:30p      **Break**
- 3:00p      The History of Livestock Projects in Developing  
Countries—*Sebastian Heath*
- 3:30p      From a Perfect to 'Unnatural' Cycle: the Emergence and  
Decline of Rendering Plants in The Netherlands,  
1920-2000—*Peter Koolmees*
- 4:00-5:30p      Annual Business Meeting  
*Presiding officer: Robert McClure*