

# Letters to the Editor

## Humane teaching methods: evidence versus bias

Some *JAVMA* readers appear to be having difficulty accepting the results of the recent systematic review by Patronek and Rauch<sup>1</sup> of studies of biomedical student learning outcomes achieved by alternative teaching methods, in comparison to terminal live-animal use.<sup>2</sup> Five studies examined veterinary students, of which two resulted in superior and three resulted in equivalent learning outcomes, when alternatives were used in surgery and physiology teaching laboratories. Patronek and Rauch concluded that alternatives are a viable method of instruction in the field of biomedical education. Parker,<sup>2</sup> however, asserted that Patronek and Rauch's conclusions stemmed from bias. Given that no details were provided to substantiate this fairly serious accusation, whereas Patronek and Rauch's conservative conclusions arose from an independently verifiable systematic review, Parker's position, in my opinion, more accurately meets the definition of bias: "a tendency or inclination that prevents unprejudiced consideration of a question."<sup>3</sup>

Such opposition to alternative teaching methods is not uncommon among veterinarians. While a veterinary student at Western Australia's Murdoch University in 1998, I had to initiate legal action before Murdoch allowed alternatives to terminal animal use. To its credit, Murdoch then responded positively by introducing Australia's first formal policy allowing conscientious objection by students, agreeing to provide them with humane learning and assessment activities on request. Similar policies have since been adopted by other universities within Australia and the United States.

In 2000, a classmate and I became Western Australia's first veterinary students to win the right not to participate in terminal

animal use during our fourth-year surgery laboratories. However, to my knowledge, ours was the only alternative veterinary surgery course worldwide in which the faculty charged with providing nonharmful practical instruction refused to do so because of their opposition to the concept, instead requiring students to arrange their own instruction outside the university in private clinics and animal shelters. Despite this, we succeeded, gaining five times the surgical experience of our conventionally trained classmates. It was also deeply satisfying to be contributing positively toward the dog and cat overpopulation problem through neutering, thereby preventing unnecessary deaths.

Since then, veterinary student colleagues at all of Australia's other established veterinary schools have experienced opposition when requesting humane learning methods. Nevertheless, some were successful, with the result that by 2005, the first students had graduated from all four established Australian veterinary schools without participating in terminal surgery laboratories. The University of Sydney went further, entirely eliminating these laboratories in 2000.

Systematic reviews by Patronek and Rauch as well as my own<sup>4</sup> have demonstrated that veterinary educators can best serve their students and animals, while

minimizing financial and time burdens, by introducing well-designed teaching methods not reliant on harmful use of animals. I encourage those opposed to our conclusions to either present their contrary evidence or reconsider their opposition.

Further information about humane teaching methods in veterinary education is provided by Jukes and Chiuia,<sup>5</sup> at [www.HumaneLearning.info](http://www.HumaneLearning.info),<sup>6</sup> and on the University of California, Davis, Center for Animal Alternatives Web site.<sup>7</sup>

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1. Patronek GJ, Rauch A. Systematic review of comparative studies examining alternatives to the harmful use of animals in biomedical education. *J Am Vet Med Assoc* 2007;230:37-43.
2. Parker JS. Sees review of biomedical education methods as biased [lett]. *J Am Vet Med Assoc* 2007;230:657.
3. Definition of bias. Available at: [www.dictionary.com](http://www.dictionary.com). Accessed Apr 1, 2007.
4. Knight A. Humane teaching methods demonstrate efficacy in veterinary education. In: Dandie G, ed. *ANZCCART Conference 2006: proceedings*. South Australia, Australia: Australian & New Zealand Council for the Care of Animals in Research and Teaching (ANZCCART), 2007;in press.
5. Jukes N, Chiuia M. *From guinea pig to computer mouse: alternative methods for a progressive, humane education*. 2nd ed. Leicester, England: InterNICHE, 2003. Available at: [www.interniche.org/book.html](http://www.interniche.org/book.html). Accessed Apr 5, 2007.

### Instructions for Writing a Letter to the Editor

Readers are invited to submit letters to the editor. Letters may not exceed 500 words and 6 references. Not all letters are published; all letters accepted for publication 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 e-mail ([JournalLetters@avma.org](mailto:JournalLetters@avma.org)) or fax (847-925-9329) is encouraged; authors should give their full contact information including address, 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. Viewpoints expressed in published letters are those of the letter writers and do not necessarily represent the opinions or policies of the AVMA.

6. Knight A. Humane education resources. Available at: [www.HumaneLearning.info](http://www.HumaneLearning.info). Accessed Apr 5, 2007.
7. Weng H. Teaching protocols: veterinary medicine. Available at: [www.vetmed.ucdavis.edu/Animal\\_Alternatives](http://www.vetmed.ucdavis.edu/Animal_Alternatives). Accessed Apr 5, 2007.

### Dr. Parker responds:

I thank Dr. Knight for his response to my letter to *JAVMA*. It would seem that he may be confused about what constitutes bias and what does not. I'm curious as to how anyone might be able to posit an opinion, such as what I expressed in the March 1, 2007, *JAVMA*, as totally pure and unbiased. One must always take into consideration that some bias is necessarily present in each and every one of our opinions, letters in my case, but should be absent as much as possible in any valid scientific study.

Dr. Knight seemed to miss an important point in my letter: that the "strong emotional response" of some students cited by Drs. Patronek and Rauch in their article suggests that the emotive response of the students studied carries as much, if not more, weight as more objective criteria that could be quantified. If this were the case, it is important to determine whether an attempt to scientifically randomize students on the bases of their feelings was made.

Certainly, it is important to determine whether students who see "animals immobilized under anesthesia" as "shocking" learn differently in the face of alternative surgical methods than those who do not. Are there tendencies inherent in those who do that may bias their learning outside of surgical training? Was this investigated? Not doing so biases the research, does it not, especially if we take for face value Drs. Patronek and Rauch's assertion that "(such an) emotional response detracts from learning"?

I would speculate that many veterinarians, myself included, have no difficulty with alternative methods of surgical education, with the caveat that such methods be as effective and cost-conscious as those traditionally taught. How-

ever, when authors of articles on educational research rely on the emotive responses of participants in their study to defend their research results, it begs the question whether the results of such a study are scientifically valid.

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### Thoughts on AVMA's stand on foie gras production

The Association of Veterinarians for Animal Rights (AVAR) is once again submitting a resolution requesting that the AVMA House of Delegates oppose the practice of force-feeding ducks and geese to produce foie gras. Although this practice has been denounced by the European Union's Scientific Committee on Animal Health and Animal Welfare in its study and is outlawed in 18 countries because it violates animal cruelty laws, the AVMA states that science does not support the contention that this form of food production constitutes unacceptable cruelty.

Foie gras is the only food item that requires the intentional creation of a severely diseased organ (a liver in failure) in an ill animal. For this reason, AVAR believes that our profession should adopt a position of censure in regard to foie gras production because the ducks in the last 2 weeks of the force-feeding become so ill as to suffer, thereby invoking our first Principle of Veterinary Medical Ethics: "Veterinarians should first consider the needs of the patient: to relieve disease, suffering, or disability while minimizing pain or fear."

As a rebuttal to the AVMA's claim that science is lacking to prove foie gras production is cruel, I invite them to review the 900-page brief<sup>1</sup> prepared by the Humane Society of the United States in support of their lawsuit against New York State's primary producer. Hudson Valley Foie Gras is accused of violating the state's Agriculture and Markets Article No. 78, forbidding the selling of adulterated food from a diseased animal. This brief contains studies by avian and

internal medicine experts concluding that foie gras is produced from livers in extreme failure and that the necropsied birds that had been force-fed had evidence of infections and trauma. Dr. Robert E. Schmidt, a board-certified pathologist and winner of the Association of Avian Veterinarians Lifetime Achievement Award (2003), examined samples of the finished product and necropsied birds. He found the birds' livers had evidence of severe hepatic lipidosis and also described abdominal enlargement and signs consistent with hepatic encephalopathy, dyspnea, anorexia, and depression.

In testifying before several state and city legislatures on behalf of anti-foie gras legislation, it has been my repeated embarrassment to hear Hudson Valley Foie Gras proclaim that the AVMA supports foie gras production and does not find it cruel. Since the legislators have seen evidence to the contrary in the form of videos and photos, the impression created by the AVMA's supposed endorsement of the practice is unflattering, as are legislators' comments. In my opinion, the AVMA's continued rejection of its AVMA member-driven resolution and the opinions of avian experts can only damage our public image and undermine all the efforts on the part of our newly created Animal Welfare Division to prove that the AVMA is a leader in welfare reform.

As with forced molting in laying hens and the abolishment of sow gestation crates, reform in the area of foie gras will, apparently, be producer- and consumer-driven. I encourage fellow members to educate themselves on this topic.<sup>2,3</sup>

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1. Available as part of the public record in the case of *The Humane Society of the United States v Patrick H. Bremman*, index No. 7704-06, Supreme Court of the State of New York, County of Albany, 2006.
2. The Farm Sanctuary. Available at: [www.nofiegras.org](http://www.nofiegras.org). Accessed Apr 23, 2007.
3. Animal Protection & Rescue League and In Defense of Animals. Stop force feeding. [www.stopforcefeeding.com](http://www.stopforcefeeding.com). Accessed Apr 23, 2007.