

April 15, 2009

Neil Dyer, D.V.M., M.S.  
Chair, Institutional Animal Care and Use Committee  
North Dakota State University  
1735 NDSU Research Park Dr.  
P.O. Box 5756  
Fargo, ND 58105-5756

**Re: Request for the Denial of Animal Use in Advanced Trauma Life Support Courses**

Dear Dr. Dyer:

I am writing on behalf of the Physicians Committee for Responsible Medicine (PCRM) and our membership of 7,000 physicians and more than 100,000 other medical professionals, scientists, educators, and laypersons. The purpose of my letter is to urge the North Dakota State University (NDSU) Institutional Animal Care and Use Committee (IACUC) to deny the use of any live animals in Advanced Trauma Life Support (ATLS) courses—currently taught in conjunction with MeritCare Hospital—at NDSU. We ask that you deny this animal use before the upcoming April 27-28 ATLS course.

**We believe that this animal use is a violation of the Animal Welfare Act because the principal investigator provided misleading and outdated evidence about alternative nonanimal technologies and animal-based training to justify animal use in his IACUC protocol.**

Human cadavers and the TraumaMan System from Simulab have been approved for use in ATLS courses by the program's national oversight body, the American College of Surgeons (ACS). The Subcommittee on ATLS also recently approved the use of another manikin model—Synman from the Swiss company Synbone—for these courses.

Since the ACS approved the use of the TraumaMan System in 2001, the simulator has quickly become the standard for ATLS surgical skills training in the United States. An ongoing PCRM survey of ATLS programs in the United States and Canada has to date received responses from 202 programs. Only 14 of these programs—including only 10 U.S. programs—still use animals for ATLS surgical skills training (see attached).

When asked to explain why alternatives “were not found to be suitable” for the training of ATLS surgical skills, Thomas Colville, DVM, MS, the principal investigator (PI) for NDSU's ATLS program, states that live pigs are used to “give the medical personnel the correct ‘feel’ of real tissues” (see page three of 11 of the appended IACUC protocol). Dr. Colville goes on to evidence the importance of animal use in this training by citing four articles. **Yet despite the overwhelming acceptance of the TraumaMan System since 2001 in his 2006 protocol Dr. Colville cites four articles published between 1989 and 1996.**

**The presentation of this outdated and thus misleading evidence by Dr. Colville points to a misunderstanding or disregard of the current standard for ATLS surgical skills training, and the initial and subsequent approvals of this protocol demonstrate a lack of adequate oversight by the NDSU IACUC.**

Not only have the above-mentioned nonanimal alternatives been approved by ACS for ATLS courses, but they have been proven more effective in teaching the procedures that make up the surgical skills portion of the ATLS course. According to a study published in the November 2002 edition of the *Journal of the American College of Surgeons*, study participants misplaced 30.2 percent of cricothyroidotomies (an ATLS surgical skill) when performing the procedure on live animals compared to only 3.6 percent when using human cadavers (McCarthy).

In addition, a study published in the July 2002 edition of *The American Surgeon* concluded that “students found [the TraumaMan System] to be superior to the animal model in teaching surgical airways . . . and the management of pneumothorax” (Block). A November 2008 *Journal of Trauma* article found the following: “Unlike animal models, Trauma Man [sic] has replaceable ‘skins’ that allow for specific procedures to be repeated frequently. In recent years, Trauma Man [sic] has become widely used in ATLS” (Cherry and Ali).

A fundamental goal of the Animal Welfare Act is the minimization of animal pain and distress via the consideration of nonanimal alternatives (7 U.S.C. § 2143(a)(3)). To this end, Section 2143 of the Act and Title 9, Section 2.31(d)(1)(ii), of the Act’s implementing regulations require that a PI consider alternatives to procedures that may cause more than momentary or slight pain or distress to any animal used for research or education purposes.

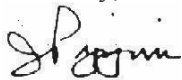
If the PI determines that no alternatives exist, he or she must provide a written narrative to the institution’s IACUC describing the methods and sources used to determine that alternatives were not available. The written narrative should include adequate information for the IACUC to assess that a reasonable and good faith effort was made to determine the availability of alternatives or alternative methods. If a database search or other source identifies a *bona fide* alternative method (one that could be used to accomplish the goals of the animal use proposal), the written narrative must justify why this alternative was not used. **Unfortunately, during his March 13, 2007 database search Dr. Colville failed to even use the phrases “ATLS” or “Advanced Trauma Life Support.” The PI would have located the above articles and others detailing bona fide alternatives if an adequate search for alternatives to the use of animals had been conducted.**

With acknowledgement by ACS that human cadavers, TraumaMan, and Synman are educationally equivalent to live animals for ATLS surgical skills training, and considering the overwhelming use of nonanimal models at more than 90 percent of the U.S. facilities that offer the course (including St. Alexius Medical Center in Bismarck and all programs managed by the Minnesota Statewide Trauma System), **there can be no valid justification for using live animals in NDSU’s ATLS course.**

PCRM requests that the NDSU IACUC deny animal use for all ATLS courses, in order to bring the NDSU program into compliance with the Animal Welfare Act and current standards of practice.

Please reply to us at your earliest convenience. Contact information is listed below. Thanks for your consideration.

Sincerely,



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