

July 7, 2004

Karen A. Holbrook, President  
The Ohio State University  
205 Bricker Hall  
190 North Oval Mall  
Columbus, OH 43210-1357

Re: Spinal Injury Modeling Course

Dear Dr. Holbrook:

I am writing today to express serious concerns about Ohio State University's Spinal Injury Modeling Course. My colleagues and I agree that this course is inherently cruel.

During each three-week course, a total of 249 animals (189 rats and 40 mice) are subjected to multiple major survival surgeries and serious injuries, as instructors attempt to teach students how to produce a "spinal cord injury model." The spinal cords of the rats are exposed and injured by blunt traumas or transections of varying degrees. In some cases, the animals are then forced to perform behavioral exercises that are clearly distressing, including forced swimming, treadmill running, sensory and reflex testing, and other exercises for 45 minutes at a time. Post-surgery, the animals are likely to be in extreme pain. The mechanisms of pain in rats are, for all intents and purposes, the same as in humans and other mammals, and tissue damage of this sort may result in hyperalgesia. Further, the method of administering anesthesia, IP injection, is itself frequently painful. Since recent research indicates that even routine laboratory procedures, such as subcutaneous injection, oral gavage, and investigator handling, result in demonstrable and persistent stress, the animals involved in these highly invasive studies are certain to experience ongoing pain and distress. As stated in the protocol description, animals could go up to 11 hours without being assessed for pain. Even in the best circumstances, pain may not be apparent to an observer.

The use of different sexes, types, and genetic strains of animals is not justified in this course. The response differences between genetic strains, sexes, or types of rats could perhaps be illustrated by a video of one of the investigators' research projects, or simply by stating what has already been reported in the literature.

Ordinarily, technicians learn research techniques in the course of their work on research projects, under close supervision of advisors. This course will involve the gratuitous deaths of 249 animals with no meaningful research outcome.

Thank you for your attention, and I look forward to your response. I can be reached at 202-686-2210, ext. 303, to discuss this issue further.

Sincerely,



Neal D. Barnard, MD  
President