effects in the humane endpoint criteria and provide scientific justification for allowing the mice to progress to a moribund state, but currently his protocol does not contain this information, placing the mouse's wellbeing in the hands of the veterinary staff.

How can Great Eastern prevent this from recurring? An objective, humane endpoint scoring chart that includes potential clinical symptoms in addition to model-related symptoms can be used by animal care personnel to make consistent decisions about treatment and euthanasia. Official delegation of final decision-making authority to the veterinary staff by the AV, IO and IACUC should be documented. Finally, the spirit of the law in this situation should be considered. Avoidance of unapproved animal suffering is the focus of much regulatory guidance, and we think this situation provides a good example of an animal program that understands this objective.

- Public Health Service. Policy on Humane Care and Use of Laboratory Animals (US Department of Health and Human Services, Washington, DC, 1986; amended 2002).
- Animal Welfare Act. 7 U.S.C. § 2131 et seq.
 Institute for Laboratory Animal Research. *Guide for* the Care and Use of Laboratory Animals 8th edn. (National Academies Press, Washington, DC, 2011).
- Animal Welfare Act Regulations. 9 CFR. Part 2, Subpart C, 2.33(a)(2).
 American College of Laboratory Animal
- American college of Laboratory Ammat Medicine. Adequate Veterinary Care. http://www.aclam.org/education-and-training/position-statements-and-reports

Lewis is Protocol Liaison, PAM Program, Research Services; Barnett is Protocol Liaison, PAM Program, Research Services; and Gordon is Attending Veterinarian and Executive Director, Animal Resource Center at University of Texas Medical Branch, Galveston, TX.

RESPONSE

Cooperation and compassion

Pratibha Kapoor, DVM, MS, Cert LAM & G.W. Lawson, DVM, PhD, DACLAM

This scenario is, unfortunately, all too common in biomedical research. In most cases, investigators care deeply about the well-being of their research animals and comply with veterinary recommendations. In some cases, however, investigators

A word from OLAW

In response to the questions posed in this scenario, the Office of Laboratory Animal Welfare (OLAW) offers the following guidance:

In responding to this scenario, OLAW assumes that Great Eastern University has an Animal Welfare Assurance with OLAW. The scenario asks the reader to consider the authority of a clinical veterinarian to euthanize an animal.

The decision to euthanize an animal experiencing unrelieved pain and distress is clearly within the authority of the veterinarian in the described scenario. It is also an essential responsibility in the program of veterinary care and a requirement in the *Guide for the* Care and Use of Laboratory Animals (the Guide). The Guide states, "the institution must provide the AV [Attending Veterinarian] with sufficient authority, including access to all animals, and resources to manage the program of veterinary care" and "if the investigator and veterinary staff cannot reach consensus on treatment, the veterinarian must have the authority, delegated by senior administration and the IACUC, to treat the animal, remove it from the experiment, institute appropriate measures to relieve severe pain or distress, or perform euthanasia if necessary"¹. The failure of the IACUC and Institutional Official to formally delegate such authority to the veterinary staff is not compliant with the Public Health Service Policy on Humane Care and Use of Laboratory Animals² and is reportable to OLAW. Consideration of the animal and relief of suffering is a basic tenet of US Government Principle VI and should be the default in decisions concerning euthanasia³. Maximizing the data obtained to the detriment of the animal because of budgetary limitations is inexcusable, and the IACUC is well-advised to counsel the investigator.

- 1. Institute for Laboratory Animal Research. *Guide for the Care and Use of Laboratory Animals* 8th edn. (National Academies Press, Washington, DC, 2011).
- 2. Public Health Service. *Policy on Humane Care and Use of Laboratory Animals* (US Department of Health and Human Services, Washington, DC, 1986; amended 2002).
- Interagency Research Animal Committee. U.S. Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training (Office of Science and Technology Policy, Washington, DC, 1985).

Patricia Brown, VMD, MS, DACLAM

Director

OLAW, OER, OD, NIH, HHS

may be resistant or even hostile toward decisions of the veterinarians, particularly when they are faced with pressures such as limited finances or time during the course of research.

The primary goal of a laboratory animal veterinarian is to help investigators collect data while ensuring welfare of the research animals. In our assessment, the veterinarian had the legitimate authority to euthanize Scofield's mouse because the institution must have submitted an Animal Welfare Assurance to comply with the Public Health Service Policy on Humane Care and Use of Laboratory Animals (PHS *Policy*)¹. The institution's program of animal care and use described in the Assurance must have included details on authority of the veterinarian for providing emergency care including euthanasia of the research animals. The PHS Policy requires institutions to follow the Guide for the Care and Use of Laboratory Animals (the Guide)² in providing care to the research animals. Per the Guide, the IACUC, in consultation with veterinarians, determines humane endpoints for research animals, which may not coincide with the study endpoints. The attending veterinarian concurred with the veterinarian that the mouse was "nearly moribund". Most IACUCs interpret 'moribund' to mean "near death, animal may or may not be conscious"3. Various clinical symptoms such as extreme emaciation, unresponsiveness, respiratory distress and inactivity may be indicative of moribund condition⁴. The veterinarian made conscientious efforts to convince the principal investigator (PI) to euthanize the mouse, but the PI refused. The clinical condition of the mouse worsened. The veterinarian acted compassionately by euthanizing the mouse, an act that was well within his authority and job description.