Does a problem involving a pet cat require a report to regulators?

he School of Veterinary Medicine at Great Eastern University received a non-federally funded grant to perform a clinical trial with a new drug for the treatment of cardiomyopathy in pet cats. The veterinary school's clinical trial policy was to have the university's IACUC review and approve any such studies. The protocol went through the IACUC review and approval process with no significant problems. However, a problem did arise when a new resident, while on his way to work that evening and who was working for the Principal Investigator (PI) of the clinical trial, found an abandoned older cat in a carrier near the small animal clinic door. He thought he would do the PI a big favor by treating the cat with the new drug plus atenolol, a beta-adrenergic blocker used to treat feline cardiomyopathy. The approved

protocol did not include administering the two drugs together. He planned on monitoring the cat overnight to see if the combined drugs would impact various cardiac parameters as compared to the new drug by itself. He intended to euthanize the cat in the morning.

This ridiculous plan may have worked if not for an animal care supervisor who was making her morning rounds earlier than usual. She found the bottle of atenolol on a ledge and quickly recognized that it was not part of the approved protocol. When she turned around, she saw the abandoned cat, still in its carrier with some food and water. After placing the cat in a quarantine area, she notified the attending veterinarian who immediately reported the problem to the IACUC. The IACUC held a special meeting the same day.

The PI knew nothing about this escapade until informed by the IACUC. Since there was no federal funding of any kind, must the IACUC report this incident to OLAW and the USDA, because the school had an OLAW Assurance and a USDA research registration? If the resident is suspended by the IACUC, must either of these two agencies be informed? What other actions, if any, would you suggest for the IACUC or the PI to take?

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Residents and regulations—always an adventure

ike so many questions, the answer of reporting requirements is "it depends." While we know the institution has an OLAW Assurance, we do not know the content of that Assurance. If this were federally funded research, the incident would have to be reported to OLAW. However, an institution can choose to word its Assurance to state that they will report federally funded non-compliance to OLAW. When worded this way, there is no obligation to report non-federally funded non-compliance. Since we don't know how Great Eastern College of Veterinary Medicine (CVM) worded its Assurance, we can't say whether reporting is required in this case.

Reporting to USDA is similarly "it depends." 9CFR Ch. 1 §2.31(c)(3) states that reporting to APHIS (and any federal funding agency) is required in writing within 15 business days by the IACUC when the following occurs:

 a semi-annual report documents a significant deficiency that is given a "reasonable and specific plan and schedule with dates for correcting each deficiency" by the IACUC - and -

 "failure to adhere to the plan and schedule that results in a significant deficiency remaining uncorrected"

Even if the Great Eastern CVM documents this as a significant deficiency it seems that corrective action was taken more or less immediately, so it is unlikely that the deficiency would still be uncorrected within the timeline laid out by the IACUC and thus unlikely to require reporting to APHIS.

There are no regulatory requirements for reporting the suspension of an individual in the regulations, unless explicitly stated in an OLAW Assurance. Although there is potentially no reporting requirement, it would be prudent to report this incident to APHIS via Great Eastern's USDA veterinary medical officer (VMO), as it will strengthen this relationship and build trust with the VMO. Reporting shows good faith that the IACUC recognizes a problem and is being transparent in how it was rectified.

Additional follow-up actions should be taken in this case. For the PI, it would be prudent to notify the grant sponsor to inform them of the incident, let them know data collection and analysis was not compromised and that the situation was appropriately handled and corrected. For the IACUC, this scenario is also a great opportunity for education. This resident clearly did not understand the research standards set forth by the governing bodies and the institution. The individual should be trained on the institution's research policies and expectations regarding adherence to protocols, procuring animals and appropriate animal housing, and complete understanding should be verified and documented before allowing this individual to return to animal-based research. П

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The astute resident and the IACUC

here are so many issues with this scenario and the resident's actions, however, the key question is: should this issue be reported to OLAW and the USDA? Since "the PHS Policy and the Animal Welfare Regulations (AWRs) do not distinguish between animals owned by the institution and privately owned animals," we can assume that cats being used for research purposes are covered under both USDA and OLAW requirements. The original protocol uses privately owned veterinary patients, which normally require consent from the owners. In this case, no consent was obtained for the abandoned cat and it was used without the knowledge of the PI, Attending Veterinarian, or IACUC.

The Animal Welfare Act section § 2158 states that a licensed research facility should hold the cat for a period of at least 5 days in case the original owner returns.²

The cat was procured surreptitiously, brought into the animal facility, and housed inappropriately in a cat carrier, which provides significantly less space than the USDA regulations or The Guide state, and treated.^{3,4} The approved protocol did not include using atenolol in conjunction with the new drug. If we assume that the

university's assurance covers all research animals regardless of funding, then the IACUC must report to OLAW any serious non-compliances.⁵

The institution should keep in mind that the OLAW and the USDA have a Memorandum of Understanding, agreeing to share information reported to them regarding animal welfare concerns; therefore, even if the institution reported the non-compliances to OLAW only, it can be presumed that the USDA would also be informed.

As for the resident, the IACUC's authority is to suspend an activity if warranted, not specific personnel; however, they bear responsibility for assuring that those working with animals are properly trained. The IACUC, during the special meeting, may choose to suspend the PI's protocol because of the non-compliances; this suspension would be reported to both OLAW and the USDA.7 Clearly the IACUC must discuss the actions of the resident, aside from the PI's protocol non-compliances. Were the resident's actions deliberate or just ignorant? Although the IACUC's authority does not cover HR issues, nor can they terminate someone, the IACUC can require that the

resident not perform any more animal activities until the IACUC deems that the resident is proficient in animal welfare legislation and guidances, in the ethics of animal use, in the use of the three R's, and any other trainings the institution requires. Perhaps this resident should consider another line of research not involving animals.

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We've got 99 problems but prompt reporting ain't one of them

he scenario presented is riddled with problems, including violations of the Animal Welfare Act (AWA) Regulations, animal welfare issues, IACUC protocol noncompliance, and possibly a deficiency in training.

The School of Veterinary Medicine at Great Eastern University has an OLAW Assurance and an USDA research registration; however, the clinical trial in question was supported by a non-federally funded grant. Assuming that the OLAW Assurance only covers PHS-funded studies, no report to OLAW is required. USDA only requires prompt reporting

if a protocol is suspended or if there is nonadherence to a plan of correction for significant deficiencies identified during the IACUC semi-annual program review and facility inspection². Although there are clear violations of the AWA, the scenario presented here does not meet the criteria for prompt reporting. In addition, there is no requirement to report the suspension of protocol staff to either agency.

While reporting to federal agencies is not required, the IACUC has plenty of work to do to investigate this incident, determine all aspects of noncompliance, and determine a correction plan and/or other mitigations to prevent this from happening again. Their most immediate concern should be to ensure that the cat is being properly cared for and that the resident is prevented from further work on this project until the incident is thoroughly investigated and discussed by the IACUC.

As an USDA registered research facility, Great Eastern University must comply with AWA regulations and standards, including provisions for lawful acquisition and compliance with animal health and husbandry standards.² In this

A WORD FROM USDA AND OLAW

In response to the issues posed in this scenario, the U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS) and the National Institutes of Health Office of Laboratory Animal Welfare (NIH-OLAW) provide the following clarifications.

In this scenario, a veterinary resident found a cat abandoned on the premises of the veterinary school and placed it on a clinical trial to study a new cardiomyopathy treatment without the facility's or the principal investigator's knowledge. The resident also implemented a treatment regimen that was not in accordance with the protocol of the clinical trial and left the animal housed in its original carrier overnight.

Response from USDA-APHIS

Under the AWA regulations, a research facility that obtains dogs and cats from sources other than dealers, exhibitors, and exempt persons shall hold the animal for 5 full days, which does not include the day of acquisition and the time in transit before use in the facility¹. In addition, research facilities are required to create and maintain accurate acquisition and disposition records on dogs and cats2. In this scenario, the resident should have informed the facility of the abandoned animal so the date of acquisition could be recorded and the 5 day holding period implemented. The holding period is especially important in this scenario because there was no verification of abandonment. If the cat remained unclaimed after holding, it would become property of the institution and therefore receive an official USDA tag or tattoo in accordance with the regulations³. Placing the animal on study without implementing a holding period is out of compliance with the regulatory requirements. In addition, leaving the cat in the carrier overnight, when the cat is not in transit, is not in compliance with the regulatory requirements for primary enclosures4.

After review and investigation of the concerns involving the care of this animal and the conduct of this activity, the IACUC must determine the appropriate actions to correct the non-compliance and prevent further recurrence. Reporting the action to USDA is required if the IACUC elects to suspend the activity.

Response from NIH-OLAW

Institutions must implement the PHS Policy for all activities involving animals

supported by Department of Health and Human Services (HHS) agencies and must ensure that other activities with animals do not affect or pose risks to PHS supported activities⁵. In addition to HHS agencies, the National Science Foundation (NSF), the Department of Veterans Affairs (DVA) and the National Aeronautics and Space Administration (NASA) have agreements for OLAW to provide oversight of their funded activities involving animals.

In this incident, the clinical trial is not federally funded. However, the behavior of the resident indicates a serious programmatic training failure at the veterinary school and is thus reportable to OLAW6. Under the Memorandum of Understanding between NIH and USDA, OLAW would inform the USDA of the reported noncompliance related to cats, whether the activity is covered under the AWA regulations or not⁷. The suspension by the IACUC of an individual's privileges to conduct animal research is not always reportable to OLAW. It is reportable if the reason for the suspension involves serious noncompliance⁶. If in doubt about whether an incident must be reported, institutions are encouraged to contact OLAW to discuss the details and receive guidance on what and whether to report.

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- 2. Title 9 Chapter 1 § 2.35 (d) (1-2) Recordkeeping requirements
- 3. Title 9 Chapter 1 § 2.38 (g) Identification of dogs and cats
- 4. Title 9 Chapter 1 §3.6 Primary Enclosures
- National Institutes of Health. Public Health Service Policy on Humane Care and Use of Laboratory Animals - Frequently Asked Questions. Institutional Reporting to OLAW, Question C.2 (US Department of Health and Human Services, Bethesda, MD, USA, revised 2017). [online] https://olaw.nih.gov/ guidance/facs#586
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case, the cat was found abandoned outside the clinic so a holding period of 5 full days is required before it can be used. Also, holding the animal overnight in a crate likely violated the standards for a primary enclosure, including providing adequate floor space and resting surfaces.² These deficiencies should be discussed by the IACUC and included in the minutes and the semiannual evaluation report to the Institutional Official.

From the scenario presented, it is clear that the administration of the two drugs together was not an approved activity. The IACUC should also determine if any other protocol noncompliance occurred. Questions to consider include: 1) was the cat properly enrolled in the study? 2) Was a physical exam performed and documented to determine the animal's general health and presence of cardiomyopathy? 3) Was this a trained resident acting irresponsibly, or did the PI fail to provide sufficient training and oversight? Based on the findings of the investigation, the IACUC actions may focus on the resident, the PI and all study personnel, and their future conduct of the protocol. At a minimum, the resident should not be allowed further participation on this protocol, until the IACUC has completed their investigation, and the PI should ensure that the protocol is being followed as approved.

The actions of this resident are concerning and should be brought to the attention of the director of his/her residency program. If the resident is paid with funds from a PHS training grant or other educational stipend from federal funds, the incident may need to be brought to the attention of the institutional grants department.

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