Jerald Silverman, DVM, Column Coordinator

Should 'duplicative research' still be reviewed?

The Central Intelligence Agency could have taken lessons from Dr. Phil Finster. He chaired his IACUC with an iron hand and told members only what he thought they had to know. Everything else was considered to be a state secret. He had the IACUC convinced that he, as Chairman, could decide which protocols were to be reviewed by the committee, and in the past, he had rejected from IACUC consideration protocols that, in his opinion, had no scientific value.

Finster's throne was finally challenged by Sara Newsome, a new and plucky assistant professor whose research, like Finster's, involved glucose clamping of mice for various diabetes-related studies. Finster had served on the search committee that recommended hiring Newsome, but he never dreamed that Newsome would be given a larger lab and a nicer office than he had. Finster was outwardly cordial to Newsome, but he was seething within and often tried unsuccessfully to bully her. So Finster took a different route. When Newsome submitted her first IACUC protocol, Finster, without Newsome's knowledge, withheld sending it to the committee until after he had submitted and gotten approval via designated member review for a protocol of his own that was nearly identical to Newsome's protocol. Then, with malice in his heart, he calmly told Newsome that her study would be nearly identical to his and that federal regulations and guidelines did not allow for unnecessary duplication of research. "I'm sorry, Sara," he said, "but we will not be able to review this study."

Newsome was equally calm as she told Finster it was her understanding that the IACUC had to review her study whether or not he thought it was duplicative research. But Finster held firm. So with a sweet tone to her voice, Sara Newsome said, "No problem, Phil, I'll go to our Institutional Official and see what he has to say, and if I get the same answer, I'll ask the NIH why I can't use the money they gave me for my research. I'm sure they'll look into the matter."

Although Finster was not acting in a mature or professional manner, the question remains: are there any circumstances in which Finster would be within his rights as an IACUC Chairperson to reject apparently duplicative research before the protocol reached the full committee?

RESPONSE

Is 'duplicative' really duplication?

Jenelle Johnson, DVM, MS,
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Debra L. Hickman, DVM, MS, DACLAM

There are no circumstances under which Finster would be in his rights as an IACUC Chairperson to reject any proposed research before it reaches full committee. Legally, the Chair is given no different rights in protocol review than any other member of the IACUC, and only the IACUC can withhold approval for proposed use of animals. If designated member review (DMR) was the standard process used at this institution, Finster did not forward the protocol to the IACUC and hence did not meet the legal requirement of DMR. Reviewers participating in the DMR process are not allowed to withhold approval of protocols.

The Animal Welfare Act Regulations[1] (AWARs; section 2.31 (a)) indicate that the IACUC is responsible to determine that investigators have provided "written assurance that their research activities do not unnecessarily duplicate previous experiments." For concerns regarding the possible duplicative nature of a particular protocol, referral to the full committee for discussion by a wider audience, possibly including the principal investigator, is necessary.

As Finster recently received approval for his own protocol and has not yet published the results, his contention that the studies are nearly identical and that federal regulations and guidelines do not allow unnecessary duplication of research is unsupported. Duplicative research may not be the same as duplication of research. Mandrell stated that carrying out a published research protocol (duplicative research) in order to ensure comparable results and technical competency is not considered unnecessary duplication of research[2]. In addition, Morgan introduced the term replication as the repetition of experiments or tests to increase the reliability and generality of the findings[3]. It becomes unnecessary duplication only when an experiment has been replicated several times with the same findings such that the results are predictable and further repetition of the experiment is pointless. Therefore, apparently duplicative protocols may simply be replicative and should be reviewed by the IACUC with this in mind.

Furthermore, both the AWARs[1] and the Public Health Service *Policy on Humane Care and Use of Laboratory Animals*[4] state that no IACUC member "may participate in the IACUC review or approval of an activity in which that member has a conflicting interest (e.g., is personally involved in the activity) except to provide information." Conflicting interests could also entail competing research programs, monetary rewards and personal biases that may interfere with an impartial protocol review.

In this scenario, Finster has shown a conflict of interest. He is working in the same area as Newsome, and even though there is no personal involvement or

monetary gain for either, 'first-to-publish' status may be at stake and just as valuable. The ARENA/OLAW IACUC guidebook states that if an investigator submitting a protocol believes that an IACUC member has a potential conflict, the investigator may request that the member be excluded from reviewing the protocol[5]. It is our opinion that Newsome should resubmit her protocol with a request that Finster be excluded from the protocol review owing to a conflict of interest.

1. Animal Welfare Act Regulations. Code of Federal Regulations. Title 9, Chapter 1.
2. Mandrell, T.D. Alternatives and the Animal Welfare Act. *AWIC Newsletter* **2** (1991). <http://www.nal.usda.gov/awic/newsletters/v2n1.htm>
3. Morgan, D. Avoiding duplication of research involving animals. Occasional Paper No 7. (New Zealand National Animal Ethics Advisory Committee, 2011). <http://www.biosecurity.govt.nz/files/regs/animal-welfare/pubs/naeac/occasional-paper-7.pdf>
4. Public Health Service. *Policy on Humane Care and Use of Laboratory Animals* (US Department of Health and Human Services, Washington, DC, 1986; amended 2002).
5. ARENA/OLAW. Institutional Animal Care and Use Committee Guidebook 2nd edn. (OLAW, Bethesda, MD, 2002).

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RESPONSE

Above the regulations

Felicia Ponce, RLATG, CMAR, CPIA, Kevin R. Smith, PhD & C. Andrew Matchett, DVM, DACLAM

It seems appropriate that 'finster' is the German word for 'sinister'. When Finster takes it upon himself to act as the whole committee, he violates regulations and guidance and probably the code of conduct of his facility. It is not necessarily the IACUC's responsibility to determine scientific value of protocols, as outlined in the Public Health Service *Policy on Humane Care and Use of Laboratory Animals* (PHS *Policy*)[1] and the Animal Welfare Act and Regulations (AWARs)[2].

The IACUC Chair does not have the authority to reject a research protocol outright before it reaches the committee. The Chair's responsibilities are limited to overseeing the coordination and implementation of effective, efficient systems for protocol and program review by the IACUC in compliance with the PHS *Policy* and the AWARs. These review activities can be carried out only at a properly convened meeting of the IACUC[3]. The IACUC determines whether the proposed work is duplicative in nature[2] (section 2.31, d, 1, iii). Newsome's protocol should have been sent out for committee review to allow the IACUC to evaluate whether the protocol was duplicative and, if so, whether duplication was justified. Before IACUC review, each member of the committee should be given a list of proposed activities. Written descriptions of all proposed activities that involve the care and use of animals should be available to all IACUC members, and any member may request full committee review of those activities[2] (section 2.31, d, 2).

In addition, Finster should have recused himself from the review process once he initially read Newsome's protocol and found it to be nearly identical to his work. The AWARs[2] (section 2.31, d, 2) state, "no member may participate in the IACUC review or approval of an activity in which that member has a conflicting interest (e.g., is personally involved in the activity), except to provide information requested by the IACUC, nor may a member who has a conflicting interest contribute to the constitution of a quorum."

Newsome is correct in taking her complaint to the Institutional Official, as Finster is operating outside of his defined responsibilities as Chair of the IACUC. When Finster copied Newsome's protocol as his submission, he violated the AWA (regardless of the animal species involved in the protocol) and should be removed as the IACUC Chair. The AWA[2] (section 2157) states, "it shall be unlawful for any member of the committee to (1) to use or attempt to use to his advantages any information which is entitled to protection as confidential information and include penalties of removal from the committee and a fine of not more than $1,000 and imprisonment of not more than one year; or if willful, a fine of not more than $10,000 and imprisonment of not more than three years."

1. Public Health Service. *Policy on Humane Care and Use of Laboratory Animals* (US Department of Health and Human Services, Washington, DC, 1986; amended 2002).
2. Animal Welfare Act Regulations. Code of Federal Regulations. Title 9, Chapter 1.
3. Silverman, J., Suckow, M.A. & Murthy, S. *The IACUC Handbook* 2nd edn. (CRC Press, Boca Raton, FL, 2007).

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RESPONSE

Conflict of interest

Karen Strait, DVM, DACLAM

The Animal Welfare Act and Regulations[1] (AWARs) and the Public Health Service *Policy on Humane Care and Use of Laboratory Animals*[2] (PHS *Policy*) are explicit in outlining the methods by which an IACUC can conduct protocol reviews. Only two mechanisms of IACUC review are valid under these regulations: (i) full committee review (FCR) by a convened quorum of IACUC members or (ii) designated member review (DMR) by one or more qualified IACUC members (section 2.31(d)(2) of the AWARs[1] and section IV.C.2 of the PHS *Policy*[2]). The use of DMR is contingent on all members first having the opportunity to view descriptions of the proposed projects and to call for FCR. In this scenario, Finster is unilaterally reviewing and withholding approval of a protocol of which the full committee had no knowledge. This action is clearly outside his authority as IACUC Chair. In addition to behaving in a vindictive and unprofessional manner that jeopardizes Newsome's NIH funding, Finster is putting his institution at risk.

Some IACUCs choose to carry out an administrative 'pre-review' (separate from the veterinary consultation) before formal IACUC review, and Finster may claim that he is doing just that. A pre-review is useful for ensuring completeness of an application

and serves to streamline the review process by advising the investigator on minor corrections or clarifications that may otherwise delay approval[3]. For example, during pre-review, an investigator may be advised that his protocol lacks the required written assurance that the proposed activities do not unnecessarily duplicate previous experiments[1]. Although it may be in the best interest of the investigator to address the comments, an investigator's refusal to make recommended changes cannot be used as grounds to deny formal review. The protocol must still move forward for FCR or DMR.

Alternatively, Finster may contend that he is withholding approval as a designated reviewer of the protocol. Although it is within his purview as IACUC Chair to assign himself this task, it is important to note that DMR may only be employed after all members have been provided the opportunity to call for FCR and that withholding of approval may only occur through FCR[1,2]. In this scenario, neither of these conditions has been met. Furthermore, there appears to be a conflict of interest (COI) on Finster's part. The AWARs (section 2.31(d)(2)) and the PHS *Policy* (section IV.C.2) state that members may not participate in IACUC review of a protocol for which they have a conflicting interest except to provide additional information as requested. Because Finster and Newsome engage in competing research, the potential for COI is high and Finster should recuse himself from review of her protocols. The IACUC would be well advised to develop a specific COI policy to address these situations.

An additional concern in this scenario is that Finster does not possess the qualities necessary to be an effective IACUC Chair. In large part, the Chair determines the culture of the IACUC. At a minimum, the Chair should be well versed in the regulatory requirements for conducting IACUC business and ideally, he or she should be collegial, transparent, diplomatic and ethical. Finster's behavior suggests that he has none of these qualities and is operating without the institution's best interests at heart. Perhaps it is time for a new IACUC Chair.

1. Animal Welfare Act Regulations. Code of Federal Regulations. Title 9, Chapter 1.
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).
3. Silverman, J., Suckow, M.A. & Murthy, S. *The IACUC Handbook* 2nd edn. (CRC Press, Boca Raton, FL, 2007).

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A word from OLAW and USDA

In response to the questions posed in this scenario, the Office of Laboratory Animal Welfare (OLAW) and the United States Department of Agriculture, Animal and Plant Health Inspection Service, Animal Care (USDA, APHIS, AC) offer the following clarification and guidance:

This column presents readers with a direct question: "are there any circumstances in which an IACUC Chairperson would be within his or her rights to reject apparently duplicative research before the protocol reached the full committee?" In addition, issues of ethical behavior, conflict of interest and noncompliance are raised by the scenario.

The Public Health Service (PHS) *Policy on Humane Care and Use of Laboratory Animals* (Policy) and the Animal Welfare Act and Regulations (AWARs) authorize a single direct responsibility to the IACUC Chairperson: to designate at least one member of the committee to conduct designated member review of protocols[1,2]. The APHIS *Animal Care Inspection Guide* recognizes the Chairperson as being responsible for all the activities of the IACUC, which include but are not limited to scheduling meetings, setting the meeting agenda, sending a list to members of protocols to be reviewed, moderating meetings, sending required reports to the Institutional Official and ensuring the facility's compliance with the AWARs[3]; the Chairperson may designate these responsibilities among the committee and IACUC staff. All other functions and responsibilities of the IACUC are for the full committee to consider and take appropriate action and are not for the Chairperson alone to decide.

The PHS *Policy* and the AWARs require that members not participate in the review or approval of protocols in which there is a conflicting interest[1,2]. In the scenario, the Chair determined to delay a proposal from IACUC consideration until he could prepare and have approved a similar protocol. This unethical action circumvented the committee's review for the Chairperson's personal advantage and is a conflict of interest that is unbefitting his appointment as Chairperson and IACUC member.

In the case of NIH-funded research, the PHS *Policy* and NIH Grants Policy Statement require verification of IACUC approval of those components related to the care and use of animals[1,4]. Federal requirements cannot be met if the protocol is not presented to the IACUC. Therefore, the Chairperson's actions constitute a reportable noncompliance to OLAW. In addition, the PHS *Policy* states that no PHS support for an activity involving animals will be provided unless the institution assumes responsibility for compliance with the *Policy*[1]. As such, compliance is an institutional responsibility. OLAW would expect the institutional leadership to take corrective measures to ensure the integrity and impartiality of the IACUC.

The AWARs are silent on how an institution can determine which research projects it will pursue. Those decisions are typically made at higher levels of the institution.

1. Public Health Service. *Policy on Humane Care and Use of Laboratory Animals* (US Department of Health and Human Services, Washington, DC, 1986; amended 2002).
2. Code of Federal Regulations. Title 9, Ch. 1, Part 2, Subpart C. §2.31(d)(2).
3. United States Department of Agriculture. Consolidated Inspection Guide (United States Department of Agriculture, Riverdale, MD, 2010). <http://www.aphis.usda.gov/animal_welfare/2011_Inspection_Guide//9.8.3%20Membership.pdf>
4. US National Institutes of Health. NIH Grants Policy Statement. Part II: Terms and Conditions of NIH Grant Awards. Subpart A. 4.1.1 Animal Welfare Requirements. (US National Institutes of Health, Bethesda, MD, 2012). <http://grants.nih.gov/grants/policy/nihgps_2012/nihgps_ch4.htm#animal_welfare_requirements>

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