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## RESPONSE

## **Questionable intentions**

Brad Ahrens, DVM

Money is a funny thing that people can't always agree on. Some would say it makes the world go 'round, while others believe it's the root of all evil. My mom seems to think it doesn't grow on trees, and the idea that it can buy happiness has always been a matter of vigorous debate (though it certainly makes misery more comfortable). However, one thing I think we can all agree on is that it makes a lousy motive for justifying the loss of life.

Animal research is not something that is done for the sake of convenience; it's done out of necessity. Using a computer

model or cells in a test tube is certainly cheaper and more convenient than performing surgery on a living animal. In many applications, however, animal models are a far superior means to understand processes in the context of their interactions with other systems in a complex organism. The selection of an animal model should never be made on the basis of convenience or cost; it should be made based on extensive knowledge of the problem being studied and the biological and physiological responses necessary to create an effective experiment. In Hampton's case, developing a novel animal model because of the monetary need to sustain his research is reprehensible. Even the general concept of having a second model available is not a sufficient reason to do unnecessary harm. But in this instance, he may incidentally be doing a good thing for the wrong reason.

In his haste to find a bargain by developing a small rodent model of his orthopedic research, Hampton may be unwittingly employing the principles of the 3Rs that guide the responsible use of animals in research<sup>1</sup>. Because they have thin, lightweight bones; saltatorial locomotion; and excessive musculature, rabbits may be more likely to develop complications when being used as orthopedic models compared with cursorial species such as rodents. Hence, the development of a rodent model for Hampton's research could be considered a refinement.

It is ultimately the responsibility of the IACUC to look out for the best interest of the animals, and in this case, replacing rabbits with rats is a good idea. Although money may be Hampton's primary motive, this should matter little to the IACUC, whose members should recognize the numerous potential benefits of this endeavor. I would imagine that some IACUCs might have even advocated such a substitution upon initial review. Development of a rat model could not only benefit Hampton by reducing expenses but could also benefit the institution by reducing the need to house and care for additional USDA-covered species. Hampton's pilot study might also offer a major benefit to the field of orthopedic research if he is successful in establishing a new, simpler, model for a condition previously thought to be best studied in rabbits.

Although Hampton's rationale for the development of a rat model may have been less than desirable, I think the outcome is a positive one. Regardless of intentions, "[t]he time is always right to do what is right" (in the words of Martin Luther King, Jr.), and the IACUC should move forward with this proposal.

1. Russell, W.M.S. & Burch, R.L. The Principles of Humane Experimental Technique (Methuen, London, 1959).

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