

## Alternatives can present complex challenges

### To the Editor:

In the February 2016 “Protocol Review” column, the scenario presents Dr. Ted Clark, the principal investigator, as a defiant reactionary when challenged to consider an alternative surgical procedure<sup>1</sup>. Two of the responses to this scenario focused on overcoming his resistance, but we feel that the response from Lauren Danridge, titled “A mutual understanding can promote progress,” addressed the most important issue: how the veterinarian could make a better case. This would entail a more tactful approach toward the investigator as well as greater attention toward evaluating the likelihood that a possible refinement would be truly beneficial in its net effect.

Cooperative relationships between IACUCs, veterinarians and investigators are essential to advancing ethical scientific research. IACUCs have the responsibility to ensure the ethical use of animals consistent with federal regulation, even when an investigator is problematic. However, perpetuating a stereotype of the investigator as a source of baseless resistance to change generates needless polarization among parties, making it more difficult to work through complex problems—including this one.

Given that there is often little scientific evidence to support the effect of a specific procedure on the welfare of a particular species, we think that more time should have been spent exploring the challenges that accompany choosing a course of action with limited information. In the absence of species-specific data, researchers, veterinarians and IACUCs must reason by inference, weighing the likely pros and cons of the potential refinement. Such deliberations

should consider all relevant factors, such as the age, body size, weight and physiology of the species, along with special circumstances such as pregnancy.

Although laparoscopic cholecystectomy is widely accepted as a less painful procedure in adult patients and entails a shorter recovery time than laparotomy, given that owl monkeys weigh about 1.2 kg each, published literature on related pediatric procedures should also be consulted. One review of the topic identifies specific challenges relevant to laparoscopies with pediatric patients and, by inference, small monkeys<sup>2</sup>. These challenges include a lack of instruments designed for small patients; the great amount of training needed to achieve sufficient proficiency to avoid damage to surrounding tissues; and the high risk of complications such as hypothermia and hypercarbia.

The bottom line is that if the veterinarian thinks that there is an applicable refinement to Clark’s protocol, she should start by considering the specifics of the study and then discuss the pros and cons with the investigator. Veterinarians and IACUCs should consider alternatives as they actually are—complicated issues with both costs and benefits.

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1. Silverman, J. *et al.* Should refinement ‘mess with success’? *Lab Anim. (NY)* **45**, 57–60 (2016).
2. Blinman, T. & Ponsky, T. Pediatric minimally invasive surgery: laparoscopy and thoracoscopy in infants and children. *Pediatrics* **130**, 1–11 (2012).