Evaluation of sex differences in a porcine behavior training method developed for use within a scientific research setting

Virginia Aida
University of Alabama at Birmingham, USA

Porcine models are increasingly being utilized within the scientific setting due to their similarity to humans in many aspects of anatomy and biochemical processes. Unfortunately, when considering behavioral training, there is little information regarding appropriate training of pigs prior to inclusion within a scientific investigation. Accordingly, the purpose of this study was to develop a method of porcine behavior training for the use of pigs within a scientific research setting. The described methods are based on the behavioral observations of Yucatan miniature pigs and the need to evaluate porcine behaviors over time as an experimental endpoint. The developed regime describes a step-wise approach to training pigs with defined milestones and recommended time frames. Sex differences in training and behavior were also assessed, given that sex differences in behavior and training have been observed across species. This study found that female pigs more consistently and successfully perform trained behaviors, despite males learning the tasks at a faster rate. Our findings and developed methodology can serve as a foundation to guide any scientific study in which pigs are routinely required to perform behavioral tasks such as walking, either leashed or unleashed, to a specific target.

Biography

Virginia Aida has completed her Bachelor of Arts & Science in Biology at the University of Alabama at Birmingham (UAB). She is currently pursuing her Master of Science in Biology at UAB studying traumatic brain injury and spinal cord injury in both rodent and porcine models. In the past, she developed a training regimen designed to effectively acclimate pigs into the laboratory setting and to attenuate the pigs’ stress levels during the study. In the near future, she hopes to attain her Doctor of Veterinarian Medicine and study animal behavior and ecosystem medicine.

vbeverly@uab.edu