

Ronald Myers, PhD.
Senior Science Editor
JoVE
1 Alewife Center, Suite 200,
Cambridge, MA 02140

RE: Submission of manuscript "Non-invasive approach test for laboratory-housed pigs"

Dear Dr. Myers,

I am pleased to submit an original manuscript by Hulbert et al., entitled "**Non-invasive approach test for laboratory-housed pigs**" to JoVE's behavior section. These methods were developed through our collaborative work on a porcine model of mild traumatic brain injury. The human approach test (HAT) is conducted in the pigs' home pen, therefore, they are non-invasive, but it still allows for variable housing strategies. This test is reliable and valid; HAT can be used across many laboratories and also for other types of porcine models of injury, sickness, and distress. This test was used originally developed using a scoring system to evaluate behavior-types in pigs and cattle. Our laboratories modified the test to be rapid, non-invasive, quantitative, valid, repeatable, and reliable. The sensitivity of the improved HAT allows for behavior outcomes to be used to distinguish an mTBI-treated subject from a sham-treated subject. Our goal is to create behavior protocols that many researchers can have access to and recreate the tests in their own laboratories, therefore, the medium of visual and written protocols that JoVE provides is perfect for being successful in this objective. We feel that this manuscript will be of interest to researchers that use porcine models for sickness, injury, and distress as well as researchers interested in applied ethology of swine.

I included in my file uploads:

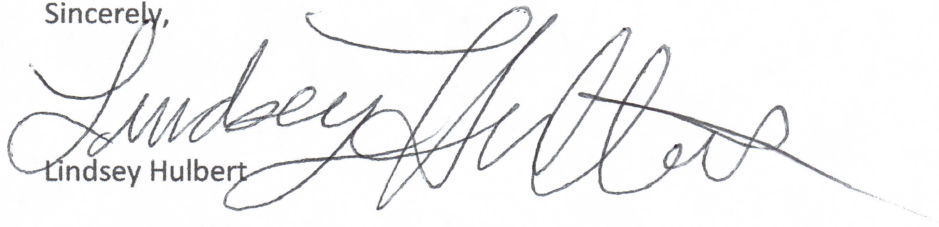
- Manuscript
- Figures
- Table of Materials
- Data collection sheet
- Videos

The videos are currently in normal speed (30 fps) and do not have any sound; we assume your team will aid in the script for the videos. We will not have the animals and facilities readily available to recreate the test, therefore, we hope one of the three play-back videos will be useful. These are unique because the video is timestamped and visually allows the audience to see the accuracy in the pig's behaviors and the adjacent behaviors. The set-up and downloading videos are available. The figures for this manuscript were created to be as visual as possible, and the tables included are also useful for researchers who need to justify experimental units for future projects.

June 4, 2018

I thank you for your consideration, and I look forward to working with your team on this manuscript for publication. If it is possible, we would like to publish or be in-press by August because the neurotrauma societies and military research meetings will be held at that time. We are hoping to advertise this article so that researchers can immediately add this simple, effective , non-invasive measure to their research and cite our JoVE article. If you have any questions, please do not hesitate to call me.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Lindsey Hulbert', written in dark ink. The signature is fluid and extends across the width of the page.

Lindsey Hulbert