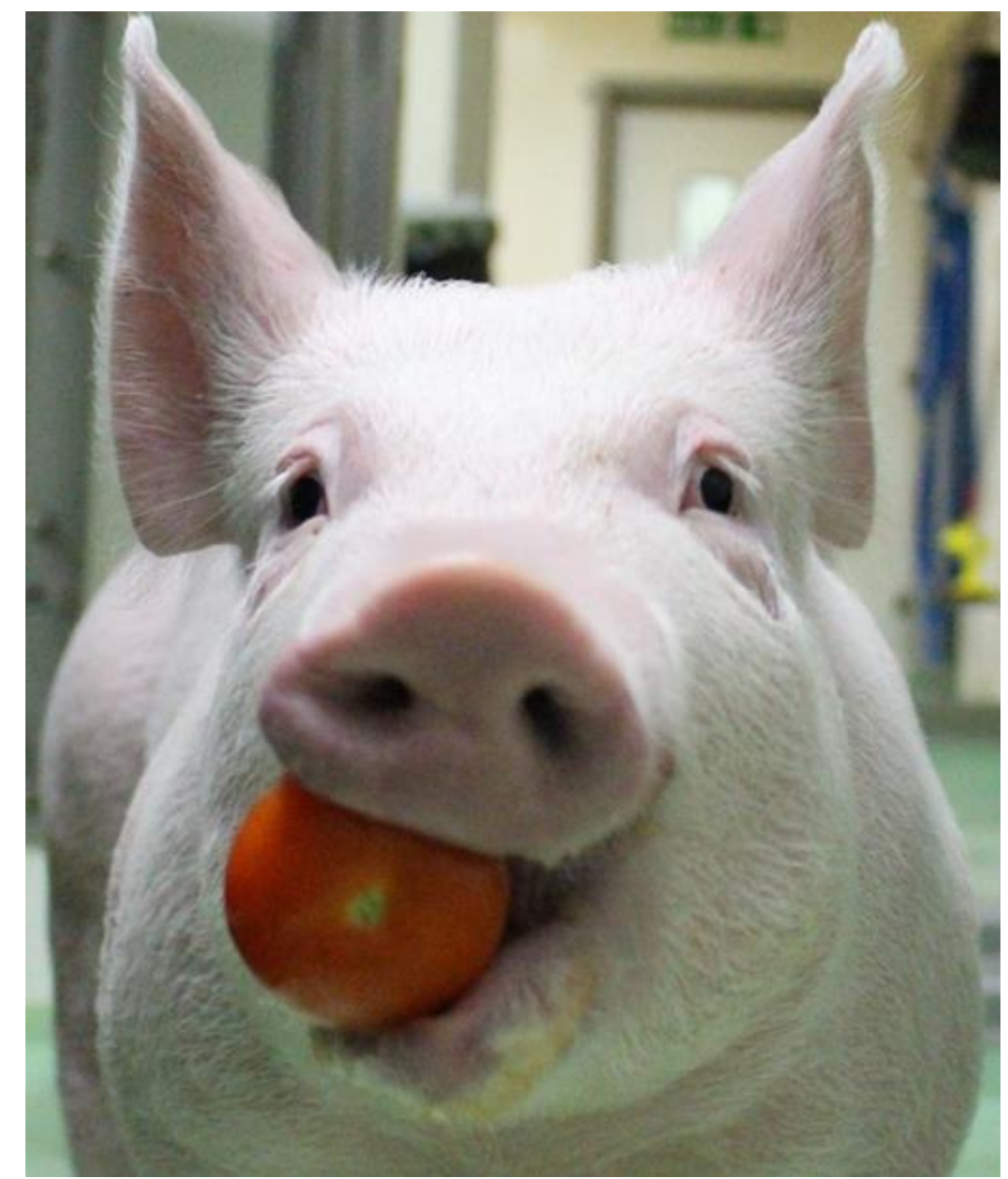


Target training pigs within an Isolation Unit (A Pilot Study)

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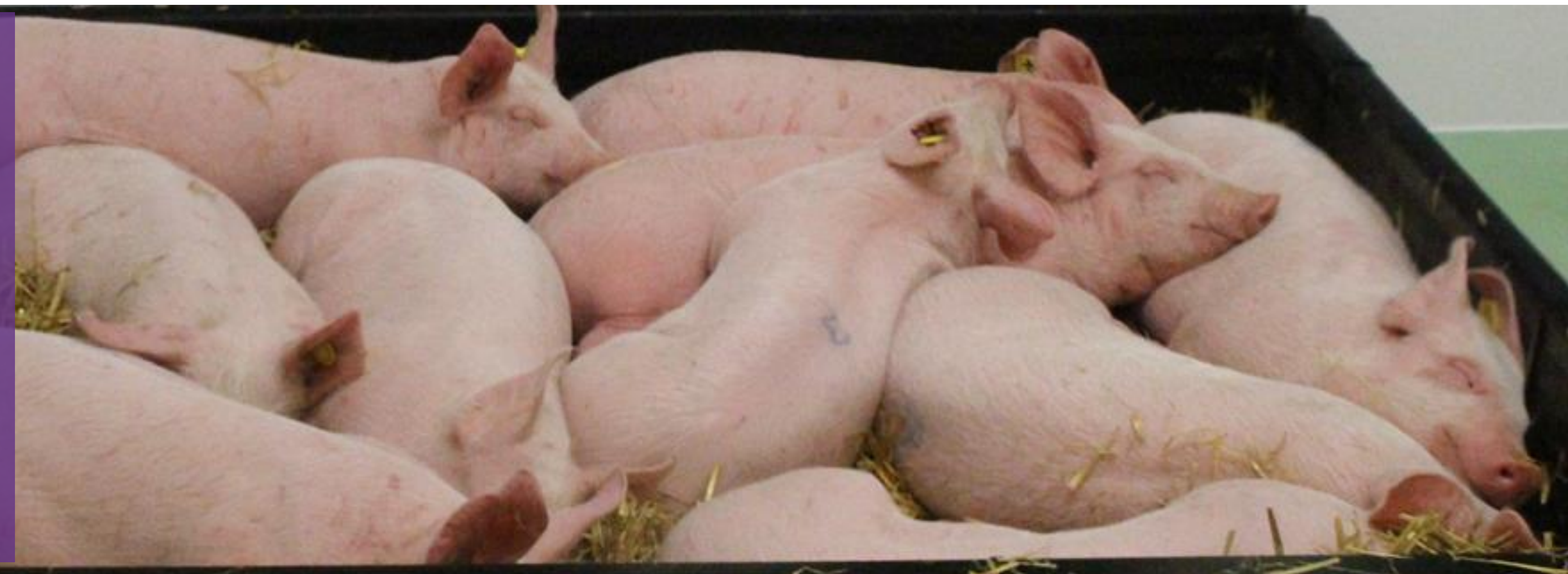


Introduction

Training is an important tool which can be used to reduce fear and distress which may occur as a result of catching, restraining and carrying out regulated procedures on protected animals. In non-human primates training vastly increases voluntary co-operation and is recommended in many guidelines¹.

The act of the training itself also acts as a great source of enrichment, even before it is completed, as well as building up trust with the animal care staff and scientists.

The Pirbright Institute undertakes research aimed at preventing and controlling exotic viral diseases of livestock. As such, we undertake much of our large animal work in high containment animal Isolation Units.



Concept

Within this high containment environment, we have started to undertake **target training** using **positive reinforcement** in pigs, with an aim to improving the welfare of the animals housed in our facility and thus the quality of the research conducted.

Target training is getting an animal to focus on or produce an action towards a target. This can be anything that is big enough for them to see and put their nose on.

Positive reinforcement is increasing desired behaviours with a reward (usually food) after they have been performed. The reward needs to be a food they are keen on and something they don't get other than for training. For this I used grapes.



[Target stick used]

Methods

I followed the method below:

1. Acclimatise the pigs to the trainer by sitting in the pen and getting them used to you.
2. Once the animals are approaching on a regular basis then reward when they come over and stay near.
3. The pigs can now be introduced to the target. If an animal approaches the target and actively touches it with their nose then a reward is given.



[Touch]



[Reward]

4. Once the group of pigs are familiar with the target repeat step 3 with individuals until they actively seek a food reward after they touch the target.
5. The target can then be moved into desired locations where the trainer needs the animal to go. Just remember the target is not a lure and rewards must continue to be given when desired behaviour is achieved.
6. After these steps have been achieved the target can be used in combination with items such as the weigh crate or a swab to make these tasks easier to accomplish. Rewards should still be given in the same way but they can also be given after the full set of behaviours has been reached.

Application

This training approach has been successfully implemented in order to make pigs move into a weigh crate. The process is shown below:



[L - Targeted pig guided into weigh crate and rewarded once reached the target]

[R - Pig guided further into the crate, rewarded and then the gate at the back is closed]



[L – Once weighed the pig can be guided out and rewarded once more. Once the pigs get used to this they can be rewarded less]

Future

Following the success in this pilot study we will:

- Continue current training program with a long term pig study to facilitate future procedures.
- Collaborate with other institutes for restraint training of pigs.
- Implement target training in other species, such as cattle.

Acknowledgements

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References

1. Prescott MJ, Buchanan-Smith HM. Training nonhuman primates using positive reinforcement techniques. J Appl Anim Welf Sci. 2003;6(3):157-61.

