

# THE MINI-COW PALPATION BOX:

*a teaching tip*

Annett Annandale<sup>1</sup> and Dietmar E Holm<sup>2</sup>

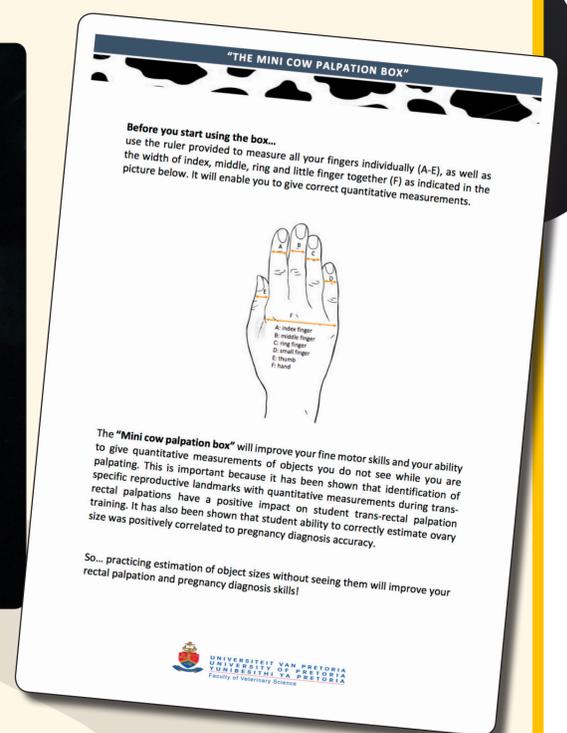
<sup>1</sup>Skills Laboratory, Faculty of Veterinary Science, University of Pretoria, South Africa

<sup>2</sup>Deputy Dean: Teaching and Learning, Faculty of Veterinary Science, University of Pretoria, South Africa



Results of a recent study showed that bovine trans-rectal palpation (TRP) objective structured clinical examination (OSCE) scores can predict students' future pregnancy diagnosis (PD) accuracy.<sup>1</sup> Students with "confident palpation skills" on OSCE were more likely to correctly identify non-pregnant cows while students' ability to estimate ovarian size was positively correlated to PD sensitivity (ability to correctly identify pregnant cows). These findings support French *et al.* who stated that asking students to give quantitative measurements of reproductive organs during bovine TRPs had a positive effect on student TRP training.<sup>2</sup> A locally manufactured "Mini Cow Palpation Box", similar to a palpation box described previously,<sup>2</sup> has been added to the veterinary skills laboratory TRP training sessions to supplement the Breed'nBetsy<sup>a</sup> and Haptic cow<sup>b</sup> simulator training prior to students' first live cow TRPs. It uses 3-dimensional objects varying in size from 2 to 8 cm. All objects are labelled with the correct length, width and height measurements in cm. The objects are placed in a plastic box with hand entrance holes to ensure palpation and size estimation of objects without visualization. A ruler to measure finger width and instructions on how to use the palpation box are attached to the box.

The additional teaching tool is hoped to improve students' fine motor, TRP and PD skills before their first live cow palpations. Students and faculty staff perceived the palpation box as a beneficial training tool and a valuable addition to the TRP skills laboratory training circuit.



## REFERENCES

- Annandale A, Fosgate GT, Bok HGJ, Holm DE. Ability of a bovine trans-rectal palpation OSCE to predict veterinary students' pregnancy diagnosis accuracy. Currently under review in a Scientific Veterinary Journal.
- French HM, Dascanio JJ, Gilbert GE, Robinson JQ. Bovine reproductive palpation training: does the cow make a difference? *Journal of Veterinary Medical Education* 45(2):219-23, 2018.
- Breed'n Betsy, Brad Pickford, Australia, <http://www.breednbetsy.com.au/>
- Haptic Cow, Virtualis Ltd, Cheshire, UK, <https://www.virtualis.com/haptic-cow/>

