

# Home-made model for training of basic ultrasound technique

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## SCOPE OF THE METHOD

<b>The Method relates to</b>	Animal health
<b>The Method is situated in</b>	Education and training
<b>Type of method</b>	Other
<b>This method makes use of</b>	Animal derived cells / tissues / organs

## DESCRIPTION

### Method keywords

veterinary medicine

skillslab training

ultrasound

dummy

## **Scientific area keywords**

Veterinary education

clinical training

## **Method description**

In the skillslab, dummy models and simulators are used for teaching various clinical skills. Basic experience of ultrasound technique and how to work with an ultrasound machine can be obtained using a basic model containing different 3D structures. An important part of this first training process can be performed on a simulator in the skillslab.

## **Lab equipment**

Home-made basic model: a fluid-filled vacuum bag containing different 3D structures. The bag is placed in a small plastic container.

## **Method status**

Still in development

History of use

Internally validated

## **PROS, CONS & FUTURE POTENTIAL**

### **Advantages**

The use of educational animal models in a skillslab offers a number of significant advantages:

- Reduced use of laboratory animals and reduced discomfort for patients, as procedures can be practised on dummy models and simulators before performing

them on a live animal.

- Teaching of clinical skills in a quiet and safe environment, reducing anxiety and stress for the veterinary student.
- Complex practical skills can be split into a number of small steps when practising them in the skillslab.

## **Challenges**

- Clinical training on live animals needed as well.
- Creating and repairing the home-made models is time consuming for a large group of students.
- A difficulty creating an ultrasound model is that air cannot be present in the bag (otherwise you have a lot of artefacts).

## **Modifications**

Towards the future it will probably be attempted to create a more complex model with anatomically more realistic structures.

## **Future & Other applications**

Training for lab animal medical imaging techniques.

## **REFERENCES, ASSOCIATED DOCUMENTS AND OTHER INFORMATION**

### **Associated documents**

## **PARTNERS AND COLLABORATIONS**

### **Organisation**

**Name of the organisation** Ghent University (UGent)

**Department** Veterinary skillslab

**Country** Belgium

*Coordinated by*



*Financed by*

