



## Meet **FRED!**

(**F**lexible and **R**igid **E**ndoscopic Training **D**evice)



### **Affordable Veterinary Training for Small Animal Endoscopy**

Minimally-invasive endoscopic procedures are increasingly used in small animal veterinary clinical practice as they result in smaller incisions, decreased post-operative pain and infection, and shorter recovery times. Practitioners need extensive training to perform these procedures without harming the animals or requiring prolonged anesthetic times. Endoscopic simulators remain cost-prohibitive for veterinary use so training relies on the use of anesthetized research animals that are euthanized at the conclusion of the training. The lack of veterinary simulators also limits ongoing practitioner self-study.

***FRED has the potential to solve these problems and provides a life-like simulation of veterinary endoscopic procedures. Read on to learn more!***



## Features:

- Life-like animal model provides realistic simulation training for minimally-invasive procedures
- Endoscopic images are virtually indistinguishable from images acquired in live patients
- Modular construction for use in multiple training procedures:
  - Gastrointestinal endoscopy module
  - Respiratory module (future)
  - Urinary module (future)
- Durable and re-usable
- Less expensive than any existing endoscopic simulator on the market

## Benefits:

- Opens the market for sales of veterinary endoscopy training equipment
- Modular design encourages ongoing sales of new and replacement modules
- Provides an affordable vehicle for training on minimally-invasive procedures, both at teaching institutions and for private practitioner self-study
- Increases practitioner proficiency quickly and with limited expense
- Can reduce the need for using live animals in terminal training laboratories

## Endoscopic Images from FRED



Stomach with  
rugal folds

Lesser incisura (upper line);  
start of pyloric outflow tract

Antrum of stomach  
(retroflexed view)

Duodenal papilla  
(indicated by white arrow)

## Contact:

The University of Tennessee Research Foundation is seeking companies who would be interested in licensing and further developing this product. Please contact:

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PD 09070 (patent application filed)