HUMANEWAY — protecting animal welfare in research

Patent Pending

Mouse&Rat Tail Vein Simulator

Greatly Contributes to **"Replacement"** and **"Refinement"** of Animal Use Alternatives

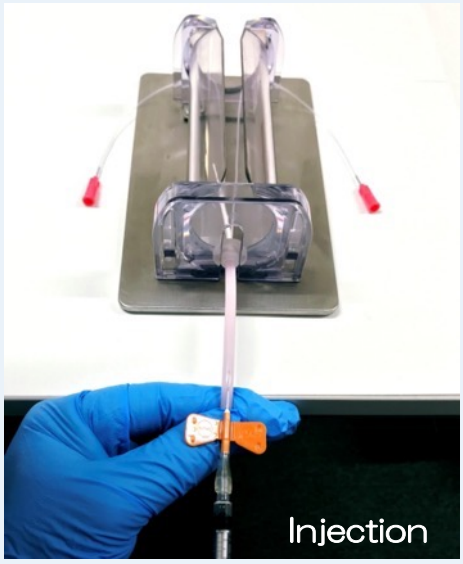
HOW TO USE MOVIE

For Injection and Blood Collection Training Prior to Using Live Animals

Feature 1 Accurately Produced for Realistic Training Experience

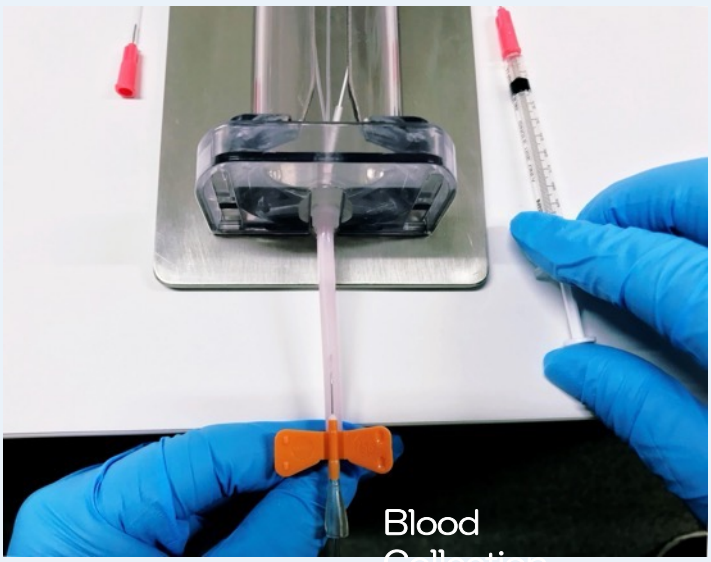
- Developed with professors and professional technicians to reproduce an actual animal.
- To be used for training before performing procedures on live animals.
- Recommended for students and beginners.

Feature 2 Vein Injection Training



- Stabilizing simulator in a restraint device (pictured above).
- Insert needles into each end of tubes (blood vessels) of the tail and inject fluid. Injection is complete when the fluid comes out from the tip of the tubes.

Feature 3 Blood Collection Training



- Stabilizing simulator in a restraint device (pictured above).
- After filling tubes with simulated blood using a syringe, insert needle into either one of the tubes (blood vessels) and apply pressure to the simulated blood in the tube with the syringe. This reproduces the blood collection process.

【Development Partner】

The simulator was developed using 3D printer and soft tissue reproduction technology under academic guidance by Dr. Masaru Kawakami of Yamagata University Faculty of Engineering and Mechanical Systems.

Hundred

www.hundred-inc.co.jp/en
E-mail：sales@hundred-inc.co.jp

Mice & Rat Restraint Device

Animals enter on their own through the **ONE WAY** SYSTEM

Patent Pending

Greatly Contributes to **"Refinement"** of Animal Use Alternatives


Bell Shaped Entrance

Designed for smooth entry that prevents injuries and stress

- Minimizes animals' distress, and significantly improves efficiency
- Ideal for procedures on the tail
- Safe to sterilize in autoclaves

Product	Animal	Inner Diameter and Base Dimension (mm)
Restraint Φ 28	Mice	Inner Diameter 28 × L110, Base：W136 × D100
Restraint Φ 32	Mice	Inner Diameter 32 × L110, Base：W136 × D100
Restraint Φ 35	Mice	Inner Diameter 35 × L126, Base：W145 × D100
Restraint Φ 47	Rats	Inner Diameter 47 × L176, Base：W183 × D100
Restraint Φ 64	Rats	Inner Diameter 64 × L215, Base：W243 × D126
Restraint Φ 70	Rats	Inner Diameter 70 × L215, Base：W243 × D126

Hundred

www.hundred-inc.co.jp/en
E-mail：sales@hundred-inc.co.jp

HUMANEWAY — protecting animal welfare in research

Winged Infusion Sets

for Laboratory Animals 25G

PAT.No.6842102

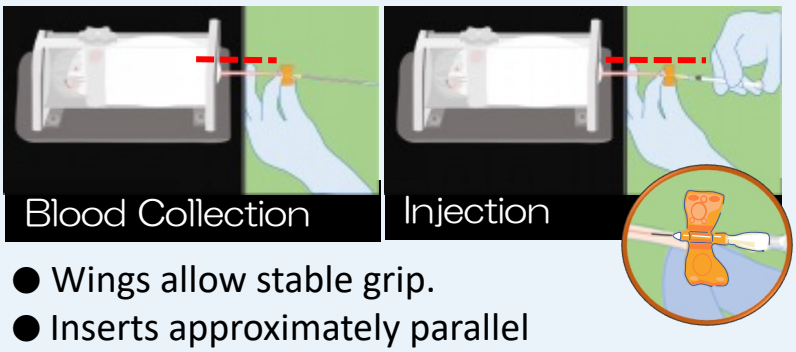
Description Video

Easy to Handle
Gentle on Animals

Feature 1 For Both Injection and Blood Collection

- Connects to hematocrit tubes or syringes and are adaptable for use in various treatments.
- Connects to both plastic and glass hematocrit tubes of various widths.

Feature 2 Easily Enters Blood Vessels



- Wings allow stable grip.
- Inserts approximately parallel to the animals' tail without being angled.
- Higher rate of successful venipuncture that lead to improvement of experiment precision.

Feature 3 Minimizes Damage

- As needles are made to be non-invasive on blood vessels and on the body, injection and blood collection can be performed frequently.
- The closed system protects the safety of animals by enabling direct blood collection from the caudal vein.
- Blood is collected through the natural flow of capillaries which keeps damage to red blood cells minimal and prevents hemolysis.

Hundred
www.hundred-inc.co.jp/en
E-mail：sales@hundred-inc.co.jp