ANIMA LAB
animal facility and laboratory equipment • animal research models

From 1963 Ugo Basile's devices have had a prominent role in research on pain & inflammation, precious tools for researchers to achieve their experimental goals. We present wide range of systems basing on conventional methods for studies with mice and rats.

ugo basile®
TRANSFORMING IDEAS
INTO INSTRUMENTS

Thermal Gradient Ring (Zimmermann's method)

An innovative device for Thermal Preference Phenotyping in mice allows discerning exploratory behavior from thermal selection behavior.

- Faster and fully automated thermal preference and pain studies
- Circular design allows values duplication, no border effect, no spatial cues
- Bias-free, reproducible data and ability to dissect exploration-driven behaviour from temperature-driven behaviour
- Gradient setup superior to two-plate choice design
- Temperature Δ proportionally divided into 12 zones per side (in the method paper 15°C-40°C = 2.27°C per zone)
- The exact temperature gradient measured in real time
- Temperature-driven, Behavior recorded automatically by ANYmaze video-tracking software

Thermal Place Preference

Two-Temperature choice, which allows monitoring temperature preferences and nociceptive thresholds in mice and rats.

- Can also be used as independent Hot/Cold Plate Device and Auxiliary Hot Plate
- For unrestrained animals - less stress for the animal, less user errors, integrated learned responses to thermal painful and non-painful stimuli

Tail Flick

Classical device, which measures the latency of the avoidance response, i.e. the flicking of the tail, when pain is induced by radiant heat.

- Adjustable I.R. intensity
- Automatic detection of the animal response
- Automatic conversion from heat % to energy
- Comfortable, unobstructed working surface

Plantar Test and Dynamic Plantar Aesthesiometer

System measures the response to infrared heat stimulus, applied to the plantar surface.

- Unrestrained animal during experiment
- Automatically recording of time latency, as well as manual
- DPA automatically detects and records latency time, and actual force at the time of paw withdrawal reflex
- Maximum force: 100g

Hot/Cold Plate

- Conventional Hot Plate to rapid precise screening of narcotic type analgesic drugs
- Cold Plate to studying cold receptors and cold allodynia in chronic pain studies
- Wide temperature range from -5°C to 65° in steps of 0.5°C (0.1°C precision)
- Detection by pedal switch
- Two working modes for testing at fixed temperature or at increasing/decreasing temperature (RAMP)

Orofacial Stimulation Test

System measures hypersensitivity to thermal or mechanical stimulation of the trigeminal area in rats and mice during voluntary access for food reward.

- Mechanical and thermal nociception assays within the same experiment
- High throughput: up to 16 animals can be tested simultaneously
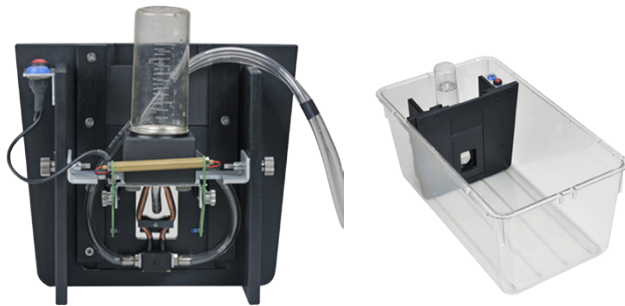
Plethysmometer

Device to measure inflammatory processes in the rat or mouse paw during rheumatoid arthritis oedema and its modifications by pharmacological processes.

- Displaying of the exact paw volume on the LCD wiht 0.01 ml resolution
- Pedal to freeze the reading - the operator can concentrate on the paw dipping
- Software inclulded

Pressure Application Measurement for Joint Pain

Easy-to-use tool for measuring mechanical pain threshold in experimental joint hypersensitivity models in rodents and larger animals.

- Designed and validated for arthritis research, it is especially suited to assess joint hypersensitivity in rodents knees or ankles
- Maximum applicable force: 1500 g
- User-controlled application of pressure directly to the joint
- Automatic recording of limb withdrawal

Analgesy-Meter (Randall-Selitto Paw Pressure Test)

Rapid, precise screening of analgesic drugs.

- Same instrument, three force ranges (from 0 to 250, 500, 750 g)
- Specific version for Mouse available, with lower (50% pressure range)
- Digital results reading

e-VF Electronic VonFrey

An electronic apparatus for applying light touch to the rodent foot for assessment of hypersensitivity in rats and mice.

- Automatic recording of animal response
- User-controlled application of force rate
- Location of the target via the original prism-design