

BIOSEB

In **Vivo** Research Instruments

Bioseb is the world's largest company and the leading manufacturer of research instruments for in vivo pain study. Additionally, Bioseb designs and manufactures solutions for anxiety and depression evaluation, motor coordination measurement as well as behavior analysis systems for neuroscience research.

> Phone: North America +1 727 521 1808 • Europe & other Areas +33 442 344 360
 > Email: info@bioseb.com

WWW.BIOSEB.COM for quote request and additional innovative instruments



PAIN - SPONTANEOUS PAIN - POSTURAL

Paw pressure and gait on freely walking rodents



KWB: Kinetic weight bearing test measures the weight born by each individual paw and gait parameters during a walking sequence in a corridor

Weight distribution on awake exploring animal



DWB: Dynamic weight bearing test Operator-independent weight distribution evaluation. Measures the postural deficit

Hind paw weight distribution for analgesic potency



SWB: Static Weight Bearing test Basic method, remote touch screen, display both force curve. Validated on mice and rats

PAIN-MECHANICAL ALLODYNIA/HYPERALGESIA

Tactile sensitivity / Withdrawal thresholds



EVF4: New version of the Electronic Von Frey test including embedded camera and numerous features improving ergonomic gesture

Mechanical nociception



PVF: Platform and Von Frey hair set complete setup for VF test

Mechanical hyperalgesia / allodynia response



RP: Rodent Pincher Luis-Delgado analgesia Pincher

Osteo-A and low back pain, post surgery



Vetalgo/Smalgo Rodents & big mammals algometers



PAIN-THERMAL ALLODYNIA/HYPERALGESIA

Operator evaluation of Sensitivity to cold/hot temperature



CHP: Cold Hot Plate static T° or dynamic ramps. Eligible to T2CT and gradient test. Ideal for cold stimuli

Automatic detection of thermal place preference



T2CT: Two Temperature Choice Test Track animal position while experiencing two temperature paradigm

Thermotaxis gradient paradigms

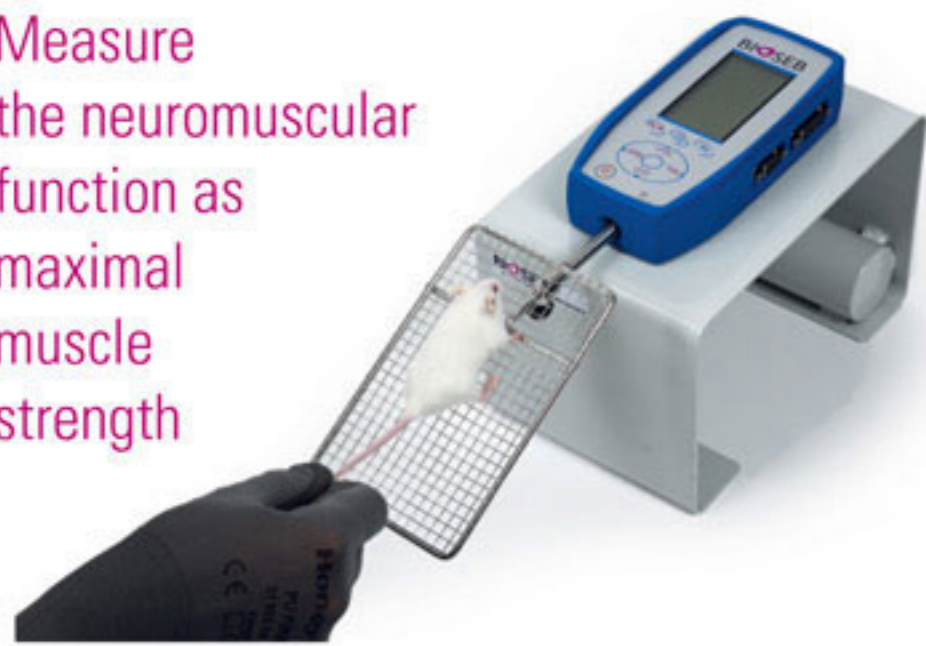


TGT2: Thermal Gradient Test track automatically the position of a rodent exposed to a gradient of temperature (5-55°C)



ACTIVITY, MOTOR CONTROL & COORDINATION

Measure the neuromuscular function as maximal muscle strength



GS3 : Full line of Grip Test for both rat and mice species, front and hind limbs procedure. Recommended by the IMPRESS

Performance based on a rotating rod with forced motor activity



ROTAROD: touch screen models of rotarods fully automated for rat mice and dual species. Software on option

Motor function and determination of subtle loss of movement capacity



FMA: Unic Automated Foot Misplacement Apparatus equipped with 154 sensors to measure paw misplacement and coordination errors. Available for rats and mice

Long term locomotor activity in the Home cage



AVM: ActiV-Meter, an innovative and instrumented platform to record distance and activity parameters of the rodent housed in its home cage

Spontaneous locomotor exercise over long period



ACTIV-WHEEL: high res. Instrumented wheels with digital display. Software for circadian rhythms. Rats and mice cages

An Novelty to assess Hypertrophic cardiomyopathy



WPT: whirl-pool test, controlled jacuzzi bath for session of «complete exercise» on mice

Forced exercise treadmills



TREAD: full line of controlled treadmills, stand alone or software controlled available for rats and mice in 1 to 5 lines

ANXIETY AND DEPRESSION DISORDER

Screening antidepressant drugs effect



TST: Automated Tail Suspension Test. Original design by Porsolt et al. High throughput-up to 6 mice, usb driven.

Depression-like behavioural test

FST: Automated Forced Swimming test for rats and mice. Learn from the expert and automate the process. Combine vibrations and video. Three states measured.



Anxiety and general locomotor activity levels



OF3D : Automated Open Field Test, track the animal in 3 dimensions (rearing included) independent from lighting

Mechanisms underlying anxiety-related behavior



EPM3C : Elevated Plus / zero Maze for rats and mice combined with tracking software suite EPM-3C

LEARNING - MEMORY - ATTENTION - ADDICTION

Fundamental properties of nervous function



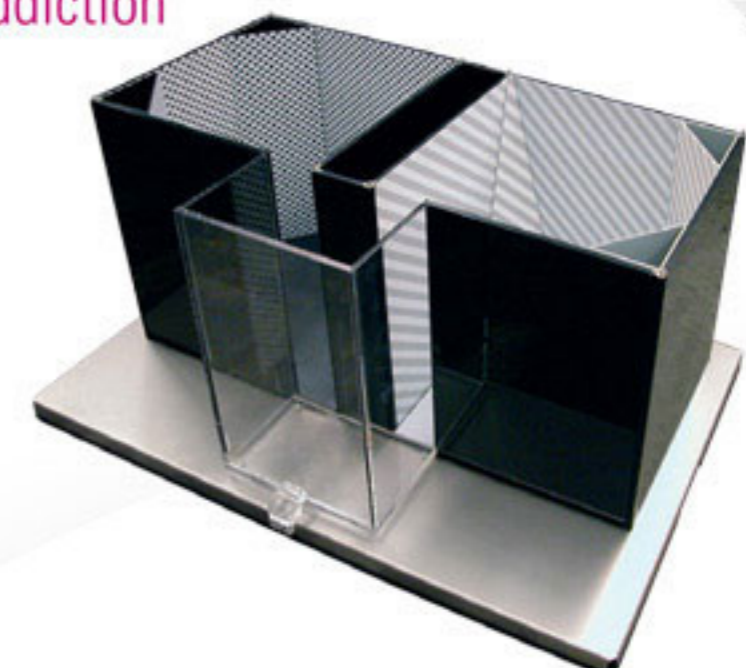
Combined Startle and Fear cdting system based on load cell detection with additional video record, fully automated

Evaluate cognition, particularly recognition memory



NORT3D: Novel Obj. recognition Task A 3D-camera based technology is now capable of adding discriminating parameters to the object exploration of rodents within an Open field Arena.

Investigating reward and addiction



PPC3D: Place Preference test manual or automated with discriminant cues in the 3 dimensions