# **ANIMA<b>ILAB**

# Behavioral research - aquatic animals

ViewPoint is a pioneer in videotracking tools and behavioral research systems. Creating high throuput systems allows large-scale screening studies on aquatic animals.

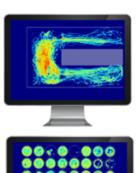


### ViewPoi ZEBRABOX - HIGH-THROUGHPUT **ANALYSIS OF LARVAE AND EMBRYOS** (ZEBRAFISH, MEDAKA, FATHEAD MINNOW)

The ZebraBox is capable of analyzing zebrafish larvae in multi-well plates, up to 96 individuals simultaneously. ZebraBox can revolutionize your research thanks to its scalability: connect up to 4 ZebraBox to one computer running the ZebraLab software.



- Temperature control with automated thermal shocks
- Module of controllable vibration and sound
- · Acoustic isolated chamber
- Shocker
- · Photomotor response and optogenetic
- · High speed camera
- PPI test
- Aggression box with mirror for juvenile zebrafish

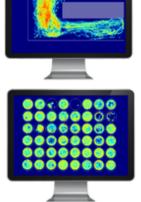


### FOR MULTIPLE ANALYSIS · Social contact, live 3D

tracking and group screening

**ZEBRALAB - SOFTWARE** 

- · Shoaling, group behavior analysis of different subjects in the same tank
- · Rotation and path angles
- Morphology manual detection by videos or screenshots
- · Automatic sizing for zebrafish long > 1 cm



### **ZEBRACUBE** - COMPACT **CABINET FOR ADULT ZEBRAFISH SCREENING**

System for monitor and score for large tanks or multiple dish, based on a 50x50 cm infrared floor. Monitors up to 4 cubicles with ZebraLab software, controlling light, sound, vibration and temperature.





### **ZEBRATOWER** - ADULT ZEBRAFISH **3D TRACKING**

System with fast, high sensitivity camera to provide behavior analysis.

- Tracking
- · Social contact and aggression
- · Sizing assays of zebrafish and in fish





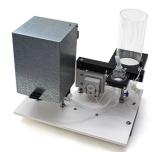
### **PSYCHOFISH** QUANTITATIVE **MONITORING AND ANALYZING OF GROUP BEHAVIOR**

System for monitor group cohesion, social interaction, locomotor activity and movement intensity.



## Cardiovascular studies – aquatic animals





# CARDIOFISH - EXAMINATION OF THE HEART FUNCTION OF ADULT ZEBRAFISH

- ECG normal and averaged analysis
- · ECG QT analysis
- HR values, HRV analysis



#### MICROZEBRALAB – HIGH SPEED CAMERA WITH SOFTWARE

Equipment for noninvasive, microscopy detection of zebrafish embryo and larvae physiological parameters.



- · Heart beat
- · Blood flow
- Blood vessels size









### CELLFISH – ACCUMULATED VOLTAGE RESPONSE (AP) MEASUREMENT OF HEART ION CHANNELS

- Dedicated for embryonic and adult zebrafish heart ion channels
- Designed for the standard microelectrode technique



# ZEBRAFISH CARDIAC PERFORMANCE - SOFTWARE FOR ANALYSIS OF GFP EXPRESSION

The analysis is based on the client GFP's heart expression videos and the results are very easily extracted. It allows measure.



- · Ejection fraction
- QT interval
- Beat defects



# WORLD PRECISION INSTRUMENTS CARDIOPHYS<sup>TM</sup> – ECG & OTHER BIOLOGICAL SIGNALS MEASUREMENT

The ECG detects the extracellular voltage change that is produced as heart cells depolarize prior to contraction. As the signal moves through the heart in succession during each heartbeat, data collected from an ECG can inform on heart rate, ahrrythmia, chamber defects, channel pathologies and more.



## Genetic & diseases studies – aquatic animals

# ZEBRAFISH MICROINJECTION TOOLBOX – SET FOR GENETIC MODIFICATION

The customizable set includes:

- MICRO-ePUMP Pressure Injector with built in MICRO-ePORE™
   Cell Penetrator to facilitate microinjections
- SU-P1000 Micropipette Puller
- PZMTIII-MI/PZMIII-MI Trinocular or Binocular Microscope
- PRO-300HDS High Definition Camera and Monitoring System
- Accessories



# FREE RADICAL ANALYZER - DETECTION OF OXIDATIVE STRESS

System provides highly sensitive detection of important physiological indicators in intracellular cell signaling and homeostasis: NO,  $H_2O_2$ ,  $H_2S$ , CO,  $O_2$ .

