

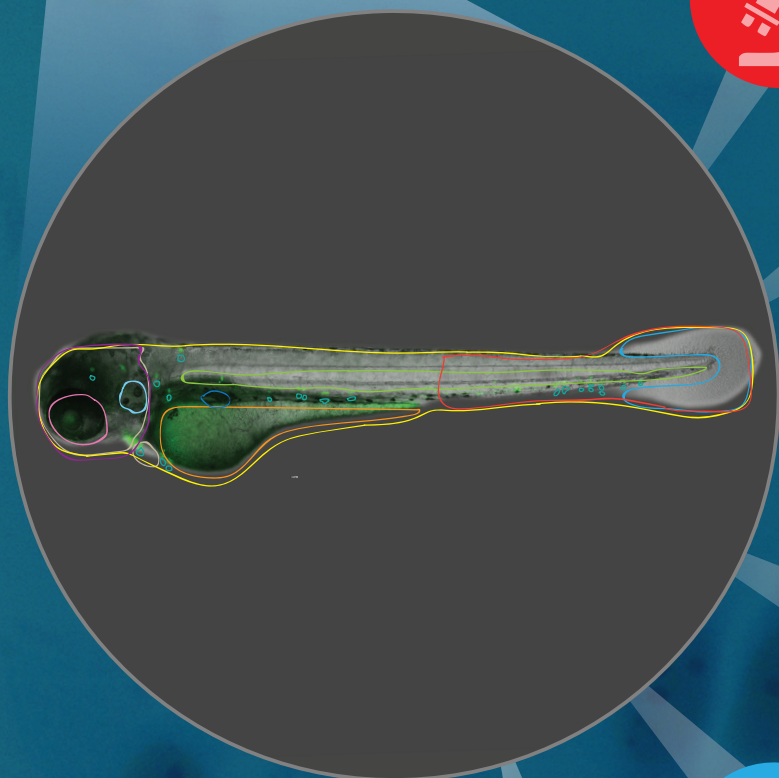


IDEA Bio-Medical Ltd.  
Seeing Better

# wiscan® HERMES for ZEBRAFISH

Zebrafish *In Vivo* Screening Empowered By Deep Learning  
When HCS Meets A.I.

NEW



High Content Imaging



Artificial Intelligence -  
Driven Analysis



Multiplexing  
Fluorescence  
& Brightfield



Parameter - Based  
Classification



Time-lapse  
& Z-Stack Imaging



Automated  
Quantitative Analysis

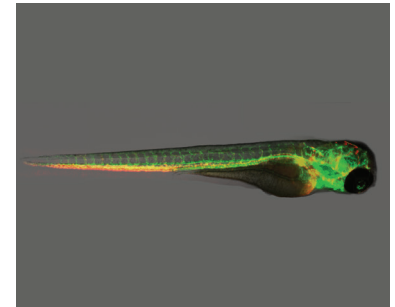
ANIMA LAB

**Revolutionary Deep Learning- Based Image Analysis For TRUE Zebrafish High-Content Screening**

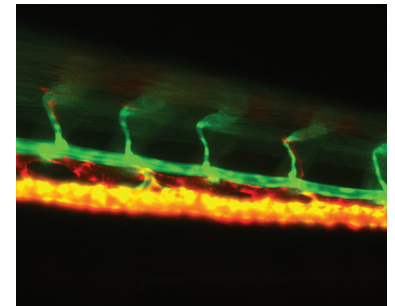
Zebrafish (*Danio rerio*) are an attractive model organism for the study of human disease pathology because of their optical transparency and genetic tractability. They serve as a great alternative to mammalian screening due to cost, throughput and reduced ethical concerns. Automated analysis of Zebrafish imposes unique demands due to the versatility of organs and features needed to be detected.

IDEA Bio-Medical is proud to present our unique dedicated imaging platform for automated data acquisition & analysis to quantify fluorescence, morphological changes & other features in Zebrafish larvae in a high throughput format.

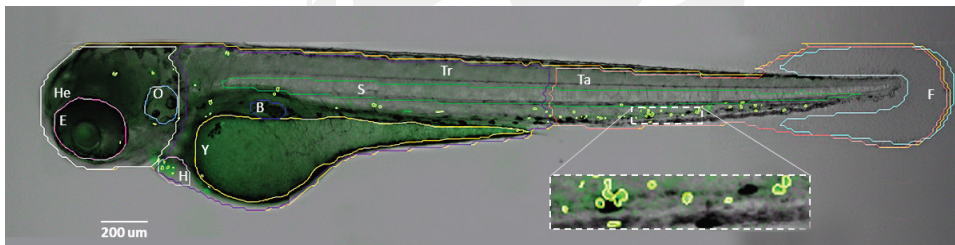
Hermes for Zebrafish automatically quantifies area, fluorescence intensity, and count of whole fish and internal organelle properties, including eye, yolk, spine, tail, brain, internal granules and more.



*Multiplexing Fluorescence & Bright field*



*Blood vessels at 10X magnification*



*Fish organs & regions automatic segmentation*

**Key Features:**

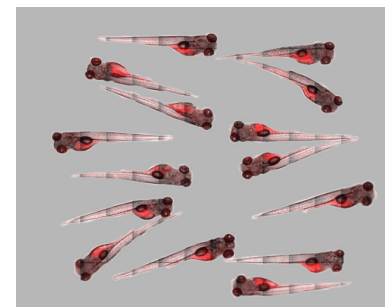
- Image & analyze Label-free or fluorescently tagged fish and internal organelles
- Multiple levels of magnification available from 2X up to 60X with high NA
- Keep images in focus from head to tail with images acquired in single plane, Z stack and projections
- Novel artificial Intelligence-based algorithms for automated fish and organ-specific segmentation in brightfield
- Unbeatable throughput: Image 96 larvae within minutes
- Ensure proper fish orientation in post-analysis with customizable, software-based selection
- Statistical data calculated per fish and per organelle

**Organs Identified Automatically or Manually**

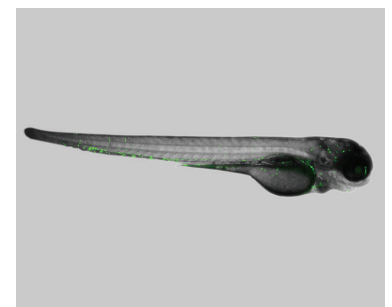
Fish Outline	Bladder
Yolk Sac	Heart
Eye	Head
Tail Fin	Trunk
Spine	Tail
Otic vesicle	Internal granules
	User-definable region

**Morphological Features Extracted**

Area
Count
Fluorescence Intensity
Shape parameters



*Well montage*



*Internal granules detection*

