# physioLens®



**Automated microscopy and dosing** 



# **Automated and Accurate**

The physioLens is a scientific platform that provides accurate physiological and image-based outcomes of precision cut lung slices (PCLS) in a reproducible fashion. It includes an automated microscope and fluid handling system.

Studying PCLS can help researchers understand pathophysiological mechanisms associated with various respiratory diseases.



### **FEATURES**

#### **Automation**

» The physioLens is capable of capturing images anywhere on slices in a 6 well plate and apply doses without user intervention. Images are analyzed in real-time to provide bronchoconstriction data.

# Dosing

- » Agonists are provided to the slice without user intervention by a dosing nozzle, that can provide a 95% media exchange in less than 20 seconds. In addition, eight dosing bottles are provided to complete a detailed dose response automatically.
- » Image analysis: Images of airways are automatically processed to capture the lumen contours and then calculate bronchoconstriction.

## Slice scanning

- » Navigating a slice is not necessary with our airway configuration wizard complete with full slice mapping. Fine tune the positions of interest with our click-and-drag XY navigation.
- » Tissue slices are held in place with a transparent when wet membrane allowing seamless sample-mounting.









