

# EXVIVO SIMULATOR

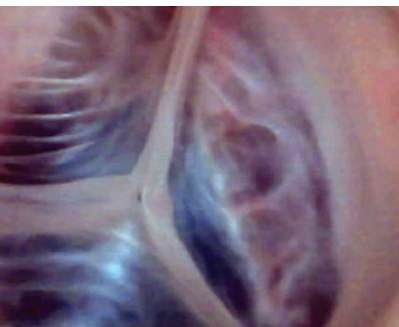
Product Codes: 29348: Ex Vivo System Bundle / 10647: SuperPump System / 25654: Compliance Assembly  
30146: Accessories / 29300: Tray Assembly

*The ExVivo Simulator uses a ViVitro Labs SuperPump to generate physiological flows in an excised heart for bench top testing. The system can model either the left or right heart, or two systems can be combined to generate a four chamber model.*

The ExVivo beating heart combines clinical anatomical similarity with controllable physiological flow and pressure signatures for bench top testing. This results in repeatability and ease of use, and anatomical and functional performance previously only found in animal models.

Access sites at the arteries, atrium and apex allow for the insertion of catheters and other devices. Optional pressure transducers and data acquisition system acquire the arterial, ventricular and atrial pressures and a flow meter measures the cardiac output of the simulator.

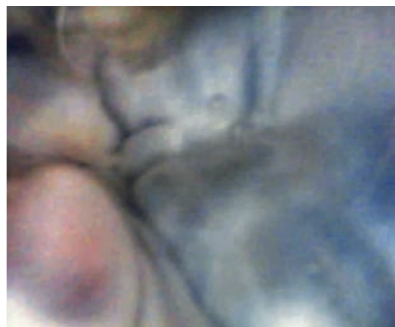
Investigate valve movement with an endoscope or ultrasound. Pathological states such as low ejection fractions and high beat rates can be simulated with the heart via the SuperPump. Degenerative and functional mitral regurgitation can be simulated by severing the mitral chords and pressurizing the left ventricle, respectively.



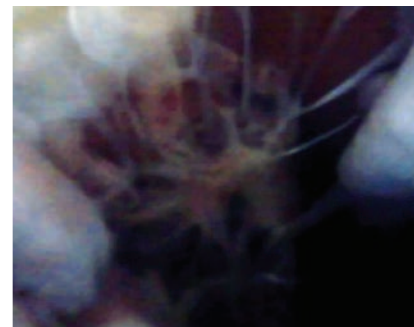
**Aortic Valve  
(Closed)**



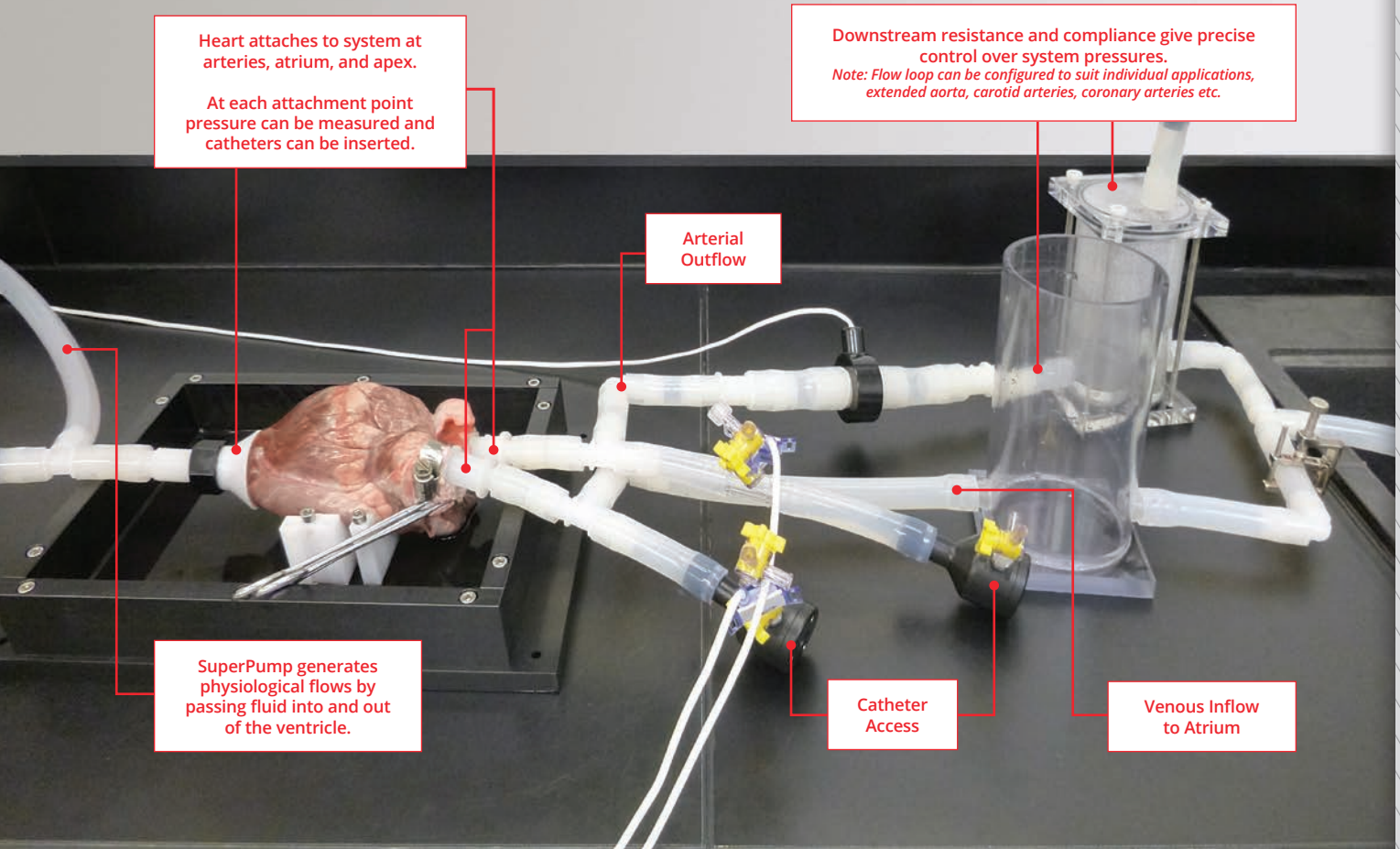
**Aortic Valve  
(Open)**



**Mitral Valve  
(Closed)**



**Mitral Valve  
(Open)**



**Optional Accessories:**



Viscoelastic Impedance Adapter (VIA)



Data Acquisition System



ViViFlow Flowmeter