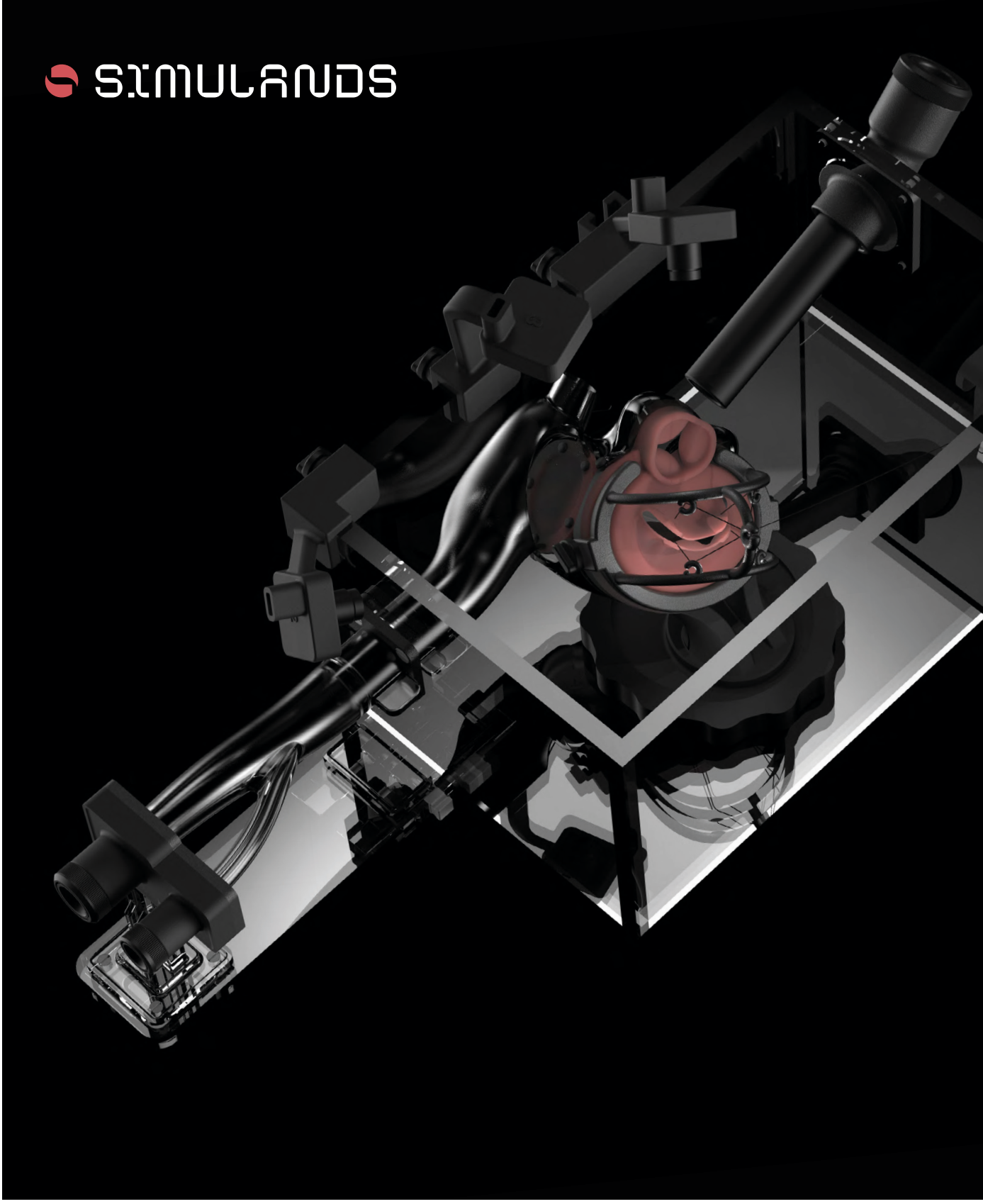
SIMULANDS



SIMU **SLICE**
Mitral

PROCEDURAL
HEART SIMULATOR
WITH LEAFLETS MOVEMENT
FOR TRANSCATHETER
MITRAL VALVE REPAIR

PROCEDURAL SKILLS & IMAGING TRAINING

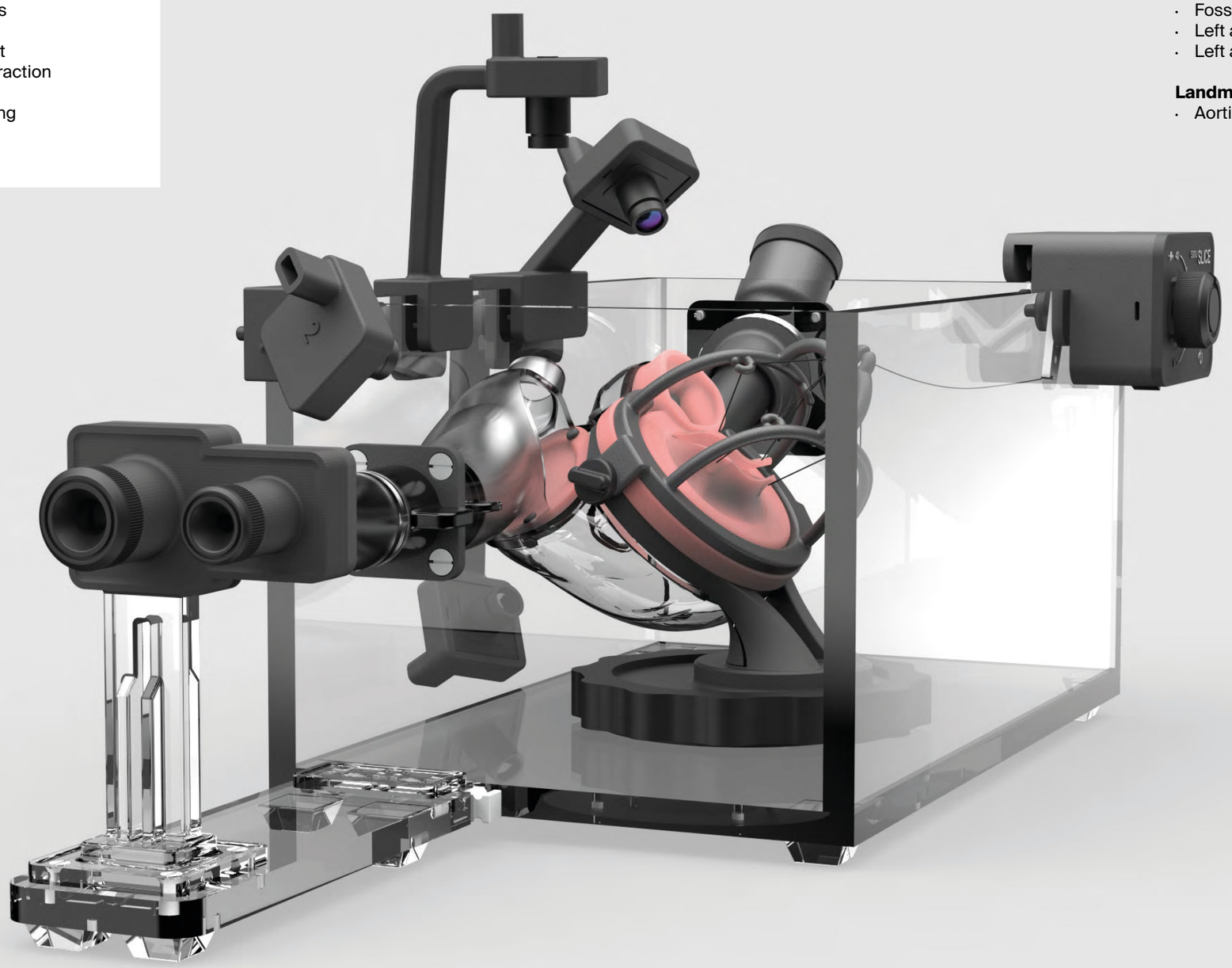
The simuSLICE platform simulators offer mechanical leaflets pulling movement

FOCUS

- Procedure and imaging

LEARN

- Procedural imaging echo and fluoro
- Advanced anatomical landmarks
- Delivery system and implant maneuvering in wet environment
- Delivery system and device interaction with moving structures
- Detailed procedural steps training



RIGID STRUCTURES

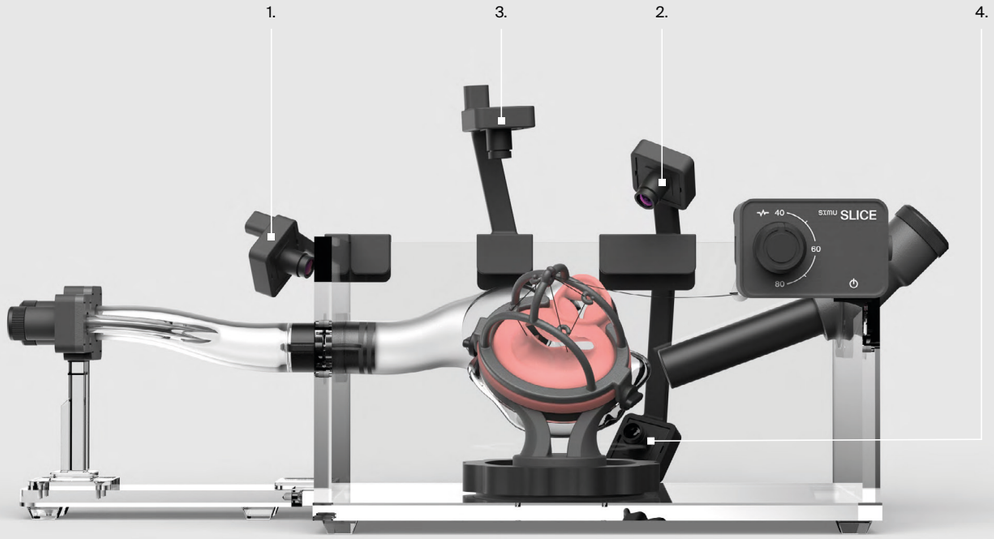
- Femoral transseptal access
- Ventricular skeleton
- ICE catheter access
- Transesophageal access

SOFT STRUCTURES

- Mitral valve
- Annulus and chordae
- Fossa ovalis
- Left atrium
- Left atrial appendage

Landmark representing

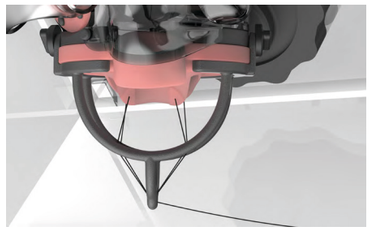
- Aortic valve



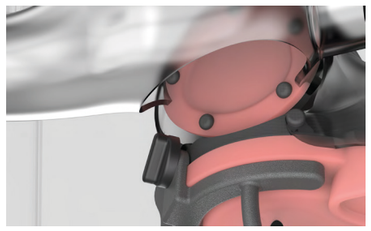
CAMERAS

Four video cameras replicating the full spectrum of main echo views. 1x tablet (2D) with split screens for visualization and recording.

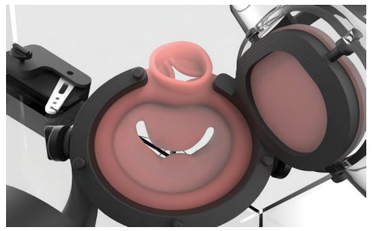
1. LVOT



2. IC



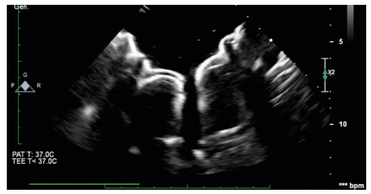
3. Bicaval



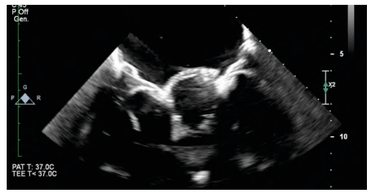
4. 3D Surgical

REAL IMAGING ECHO, ICE AND FLUORO COMPATIBLE

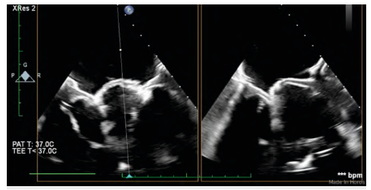
Real-time imaging training with ultrasound systems visualizing the structures of interest and the device in a realistic anatomical setting. Customized imaging to suit you needs.



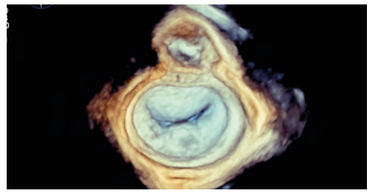
LVOT



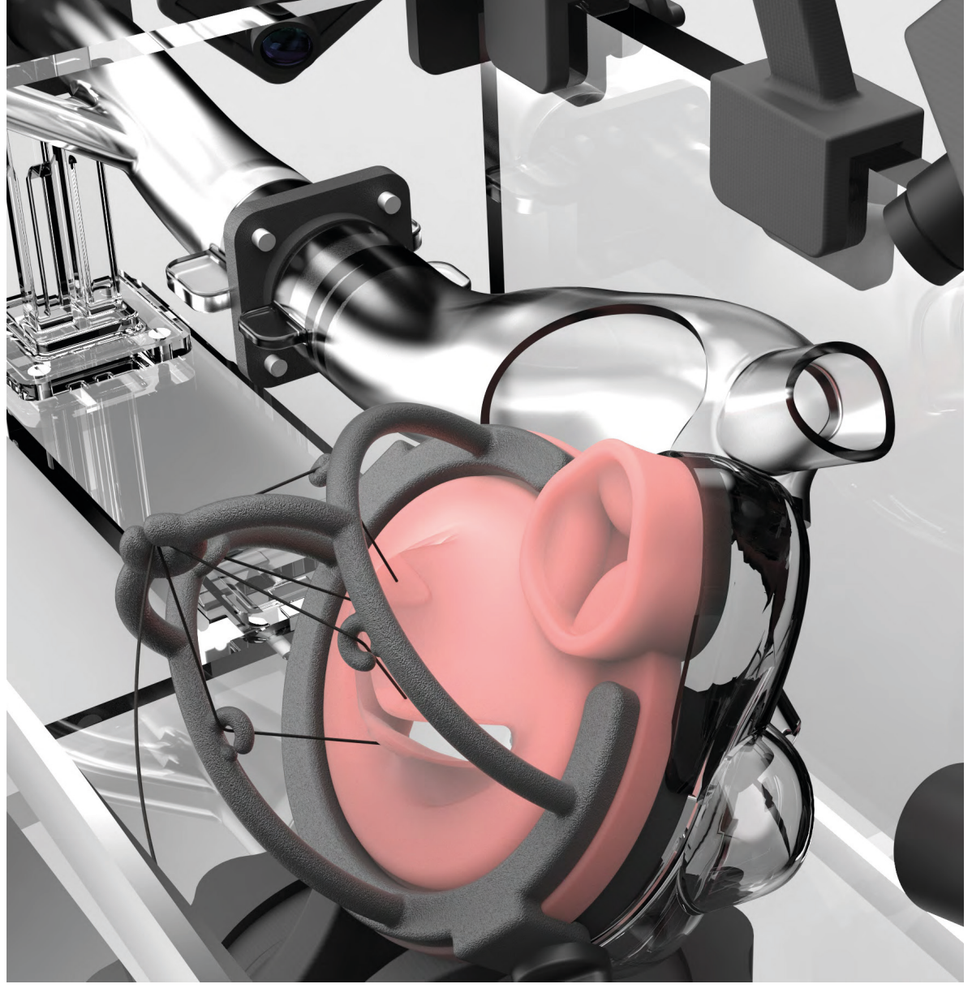
IC

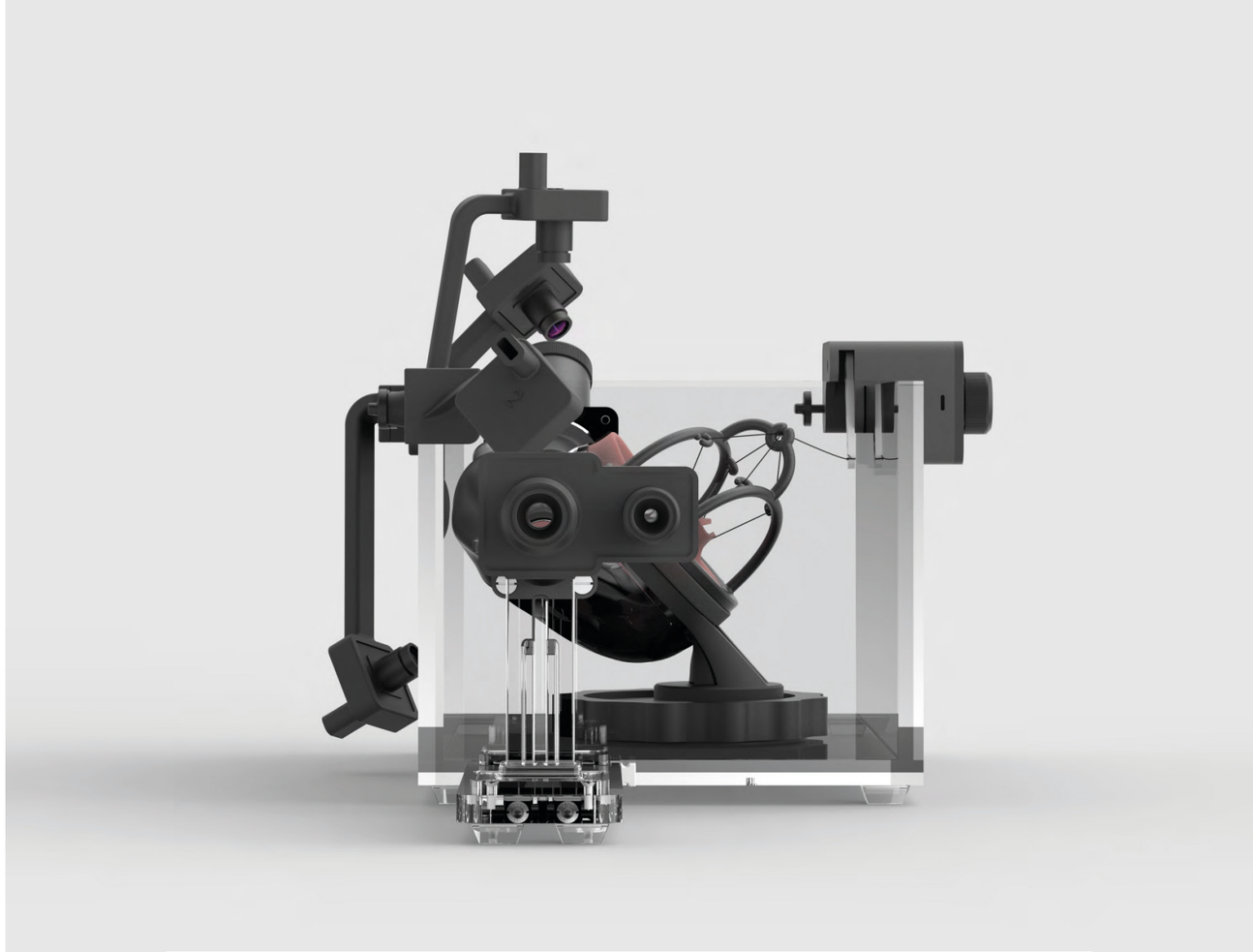


X-Plain



3D Surgical





HUMAN GRADE PLATFORM

MODULAR ANATOMICAL SYSTEM

- Device-anatomy tactile interaction in wet environment with leaflets movement
- Replicating human grade anatomy of interest: Inferior vena cava, fossa ovalis, right atrium, Mitral valve apparatus and cordea
- Based on real patients CT, MRI and 3D echo datasets

SIMULATOR COMPONENTS

Promotes understanding of 3D anatomy from 2D displays with integrated video-camera systems and fine hand-eye coordination.

MULTIPLE PATIENT SCENARIOS

Basic - Left atrium with dilated annulus.
FMR and DMR with pathological leaflets.
Simplified leaflet grasping with simplified coaptation gap.
Advanced - Challenging edge-to-edge procedure maneuvering.
Adjustable Mitral plane to the fossa ovalis and IVC change for trijectory training.
Exchangeable pathological Mitral apparatus with challenging coaptation gap for FMR and DMR disposables.

MATERIALS

Proprietary materials enhance the human grade experience with high level of echogenicity.

TECHNICAL FEATURES

IMAGING CAPABILITIES

- All components can be used in the cath lab under fluoroscopy
- Four video cameras
- 1x tablet with split screen capabilities for visualization and recording
- Transesophageal access route

SMART ENGINE

For leaflet and annular movement.
Adjustable heart rate.

IN THE BAG

All fits into: backpack
Total weight: 8kg
Dimensions: 50x40x22cm

PLUG AND PLAY

No tools required - full system setup ready in under 10 minutes.
Just add warm water and it’s ready for your device.

AQUARIUM

10L - quick water fill container included.

JOIN THE SIMULANDS REVOLUTION

Our simulator components replicate the characteristics of the human anatomy. The simulators are engineered to reproduce real life haptic interaction of the medical devices within the targeted anatomy, representing true anatomical geometries and trajectories. All of our simulators can be used under real echo and fluroscopic guidance.

SHIFTING THE PARADIGM

From Patient and Animal testing to platforms for R&D and comprehensive Hands-On procedural training using:

- Real Devices
- Real Imaging
- For the Real Heart Team

SIMULANDS systems designed and validated according to **all relevant ISO normative** requirements of clinical and technical equivalence to the human cardiovascular systems.

Our simulators are used for **human factor testing**, usability and ergonomics and meet required benchmarks of various competent authorities, ethics committees and notified bodies (CE, FDA, MDR).

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