

## SINCE

## PULSATILE PROCEDURAL HEART SIMULATOR

FOR TRANSCATHETER LEFT ATRIAL APPENDAGE OCCLUSION

#### **PROCEDURAL SKILLS** & IMAGING TRAINING

The simuSLICE pressure platform simulators offer pulsating movement of the targeted structure

#### **FOCUS**

· Procedure and imaging

#### **LEARN**

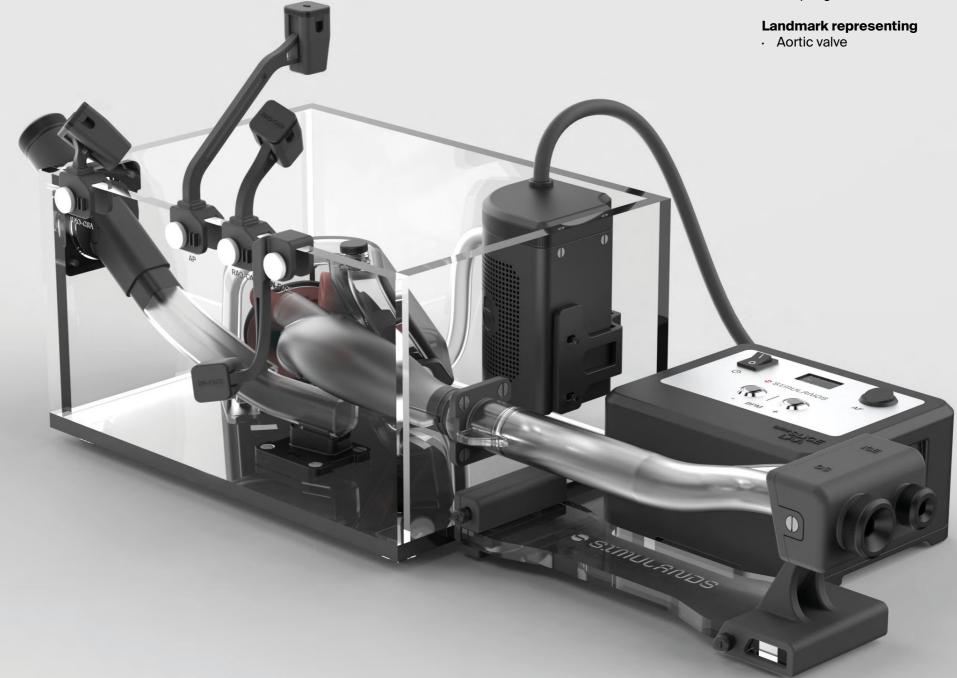
- · Procedural imaging echo and fluoro
- · Advanced anatomical landmarks
- Delivery system and implant
- maneuvering in wet environment
- · Delivery system and device functions interaction with moving structures
- · Detailed procedural steps training

#### **RIGID STRUCTURES**

- · Femoral transseptal access
- · ICE catheter access
- · Transesophageal access

#### **SOFT STRUCTURES**

- · Inferior vena cava
- · Right atrium
- Fossa ovalis
- · Pulmonary vein
- Left atrial appendageMitral valve
- · Esophagus



#### **CAMERAS**

Four video cameras replicating the full spectrum of main fluoroscopic and echocardiographic views.

1x tablet with split screens for visualization and training session recording.



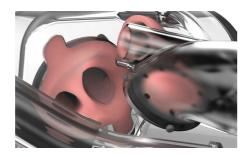
1. RAO-CRA



2. AP



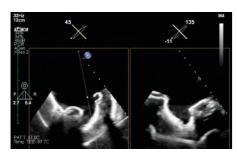
3. RAO-CAU



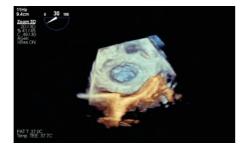
4. En-Face

#### REAL IMAGING ECHO, ICE AND FLUORO COMPATIBLE

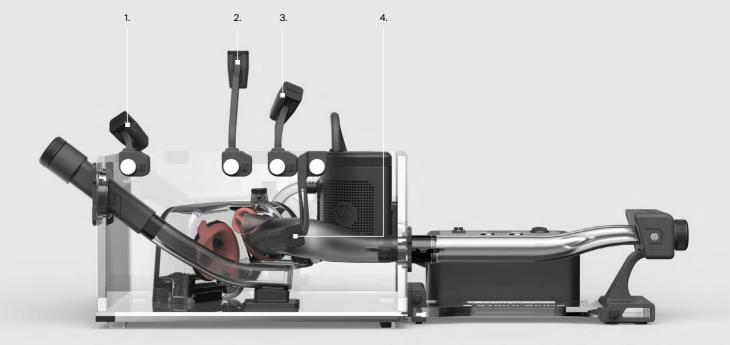
Real-time imaging training with ultrasound systems visualizing the structures of interest and the device in a realistic anatomical setting. Customized imaging to suit you needs.



X-Plane of LAA



3D En-Face of LAA



### HUMAN GRADE PLATFORM

#### **MODULAR ANATOMICAL SYSTEM**

- Device-anatomy tactile interaction in wet environment with pulsatile LAA movement
- Replicating human grade anatomy of interest: inferior vena cava, right atrium, fossa ovalis, pulmonary vein, left atrial appendage structure and mitral valve
- 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 - Simplified LAA anatomy. Advanced - Challenging procedure maneuvering with pre-punctured fossa ovalis.

Exchangeable challenging LAA anatomies.

#### **PULSATILE EXPERIENCE**

- Delivery system and implant maneuvering in wet environment
- Realistic imaging with pulsating structures

#### **MATERIALS**

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

## TECHNICAL FEATURES

#### **PULSATILE SYSTEM**

- Pulsatile portable pump system for realistic LAA movement
- Self-adjustable body temperature control (36.7°C)
- Adjustable heart rate between 40-80BPM
- · Atrial fibrillation mode
- · Adjustable pulsatile intensity

#### **POWER SYSTEM**

- 12V powered system with socket for various power cables and plugs
- Worldwide compatible with voltage from 100 to 264V at a frequency from 50 to 60Hz

#### **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.



#### **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 and realistic esophagus

#### **AQUARIUM**

10L - quick water fill container included.

#### **SETUP INFO**

Electronic IFU documentation with Step-by-Step video user training and guide for simple assembly.

#### **IN THE BAG**

All fits into: backpack Total weight: 8kg

Dimensions: 50x40x22cm



# 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).

Manufacturer:

#### SIMULANDS Ltd

Schaffhauserstrasse 611 8052 Zürich Switzerland

DMISB0822

Distribution:

#### MedThron LLC

Sharjah Media City (Shams) United Arab Emirates

Get in touch with us +971 52 969 6820 +966 56 285 2013

contact@medthron.com

Find out more on **medthron.com** 

