

## USİM > Department of Basic Simulation > USG Room

- This room has Ultrasonography and Color Doppler Ultrasonography simulators.
- Simulator consist of keyboard, monitor, US probe, one man and onewoman model (adult chest) and software.
- The screen of the system split into two parts. While watching the ultrasonographic image in the first half, you can see the anatomical images of the organs in the second screen.
- The divisible screen of system presents 2D echo image and 3D augmented reality view.
- Animated images of the organs are shown as 360° and mobile. The simulator has 2D, M-Mode and color doppler imaging.
- Reports, images and video images are taken to the USB storing device.

## The activities that can be done with these simulators:

- This simulator can be used for transthoracic echocardiography (TTE), transesophageal echocardiography (TEE), echocardiography, abdominopelvic ultrasonography and FAST (focused assessment with sonography for trauma) trainings.
- Anatomical structures are can be examined around the liver, lungs, inferior vena cava, superior vena cava, corpus of vertebrae and aorta.
- The simulator supports cardiac, pleural and abdominal pathologies more than 100.
- **TTE and TEE Modules** in the simulator consist of at least three different pathologies in addition to normal heart and lung sounds;
  - 1. Dilated cardiomyopathy- severe biventricular systolic dysfunction.
  - 2. Hyperkinetic left ventricular systolic function
  - 3. Sudden anterior myocardial infarction due to pericardial effusion
- FAST Module in the simulator consists of at least three different pathologies;
  - 1. Free fluid-hepatorenal reflection (Morrison Pouch)
  - 2. Retro vesical reflection
  - 3. Splenial-renal reflection
- **Basic Abdominal Module** in the Simulator consists of at least three pathologies;
  - 1. Hydatid cyst of the liver
  - 2. Multilocular intraabdominal abscess
  - 3. Hypoechoic hepatocellular carcinoma of the liver