

**Docket #:** S19-177

# **Multi-user, mixed reality medical simulation**

Doctors with Stanford Medicine have developed a multi-user, mixed reality medical simulation application. Medical in-situ and simulation training centers cost millions of dollars a year to administer, with limited availability to those in remote areas or the third world. Using the application developed by Drs. Caruso and Rodriguez, medical simulation can be accomplished anywhere for a fraction of the cost. Via a Magic Leap headset, up to 50 users can enter an augmented reality environment with multiple holographic patients (that move, seize, vomit, etc.), and monitors that change vital signs, ECG rhythms, oxygen saturations. The hologram is coupled with an off-the shelf simulation trainer for real chest compressions. This application is an ideal, low cost solution for training nurses, doctors, EMTs, military & ER personnel – anyone training to triage and care for patients.

## **Applications**

- Medical training and simulation. In particular,
  - Basic Life Support (BLS) certification
  - Advanced Cardiovascular Life Support (ACLS)
  - Pediatric Advanced Life Support (PALS)
  - EMT and paramedic training
  - Physician and nursing training
  - Military medical training

## **Advantages**

- Less expensive, and more convenient compared to traditional hospital training and simulation centers.

## **Innovators**

- Tom Caruso
- Samuel Rodriguez

## **Licensing Contact**

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