

BROADCAST-Beating hearts pump up virtual reality for pre-surgery planning

Anchor Lede: Imagine being a doctor who can plan a surgery in virtual reality to see the beating heart of a patient before walking into the operating room. A new grant program from OSF HealthCare and Bradley University could make this vision a reality. Dr. Matthew Bramlet is an expert in pediatric congenital heart condition. His Advanced Imaging and Modeling Lab at the Jump Simulation & Education Center in Peoria has been converting CT and MRI scans for 3D printed models and virtual reality.

VO or Wrap -Total time :36 SOC

With the ability to zero in on tissue and tumors, virtual reality viewing helps doctors better plan for surgeries. Now, Dr. Bramlet and Bradley researchers will attempt to create a 4D view, by building a software program that uses machine learning to scan medical images ...

(SOT)-Dr. Mathew Bramlet

“How do we put the CT data into a computer and slice by slice, say this is the myocardial tissue so we get an exact replica of the heart. But I don't need just one; I need 20 to make each phase of that heart (he simulates the sound of repetitive beats) into a 4D heart.” (:19)

TAG: Dr. Bramlet says researchers believe they can reduce the labor-intensive process of converting images for more immersive VR viewing from months, to just a few hours.