

Transcript of Media for 4D Heart story

Dr. Matthew Bramlet, pediatric cardiologist, director Advanced Imaging and Modeling Lab, Jump Trading Simulation & Education Center

“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 (3D replica of a heart); I need 20 to make each phase of that heart (he simulates the sound of repetitive beats) into a 4D heart.” (:23)

“The most immediate impact isn't going to be the 4D heart. The impact at a grander scale will be the scalability of how any program will be able to create models for pre-surgical planning; 3D printed or for VR with this technology.” (:24)

Sam Hawkins, PhD, Assistant Professor Computer Science, Bradley University

“First, we need to figure out what part of the image is the heart and what part is not. And then we need to combine these tiny images into a 3D image. And then we need to do that many times to get the 4D.” (:11)

“It has the potential to really remove barrier of entry for people who don't have the expertise or the time but do have images they wanted to view (more intricately).” (:12)