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**MEDIASOURCE**

## **TRAINING SURGEONS FROM THE VIDEO GAME GENERATION**

**STUDY TO SEE IF USING COMPUTER ANIMATION CAN MAKE YOUNG SURGEONS BETTER**

(COLUMBUS, Ohio) - The first generation of kids who grew up playing video games aren't kids anymore. Today, they're the backbone of the American workforce, and all that time playing games as kids, may be helping them now as adults. In fact, researchers hope to use computer animation to not only help train the next generation of surgeons, but to see how good they can really be.

After spending thousands of hours in the operating room and training dozens of doctors along the way, Doctor Gregory Wiet wanted to do more. Showing young doctors a technique is good, but it's not giving them the whole experience. After all, surgeons are not only using their eyes.

"We're also using a fair amount of information from the touch. Or what we call haptic feedback. And that's a very important aspect of what we use as far as our senses are concerned in surgery," says Wiet, MD at Nationwide Children's Hospital.

In order to give young doctors a feel for what it's like, Doctor Weit is training surgeons with a state of the art program developed with Ohio Super Computer Center that can do everything from mimic the movement of the drill to the density of the bone. Virtual patients can even bleed. It can give students life-like demonstrations before even turning over the knife.

"It's fantastic. It will sort of drill everything away for you, let you see the structure you're looking at, and then you can go back to a whole bone and drill down the structure yourself," says Laura Matrka, MD, and 2nd year resident.

For a generation of surgeons who grew up on video games, it seems like a logical fit. Although researchers are quick to point out that it's not just cool technology, it's designed to be much more.

"We want to actually see that it does transfer into learning and transfer into better outcomes eventually for our patients," says Wiet.

To do that Weit plans to begin studies soon at hospitals around the country to see who does better, students who only learn surgery using traditional methods or those who also make use of the technology so many of them grew up with.

The computer is designed to help student learn to operate on the temporal bone, the bone in the side of your face. Because it is such a sensitive and complex area, extensive training is essential. Right now most students train on the bones of cadavers which can be scarce and expensive.