## INNOVATOR

*Honorable mention*

# Dr. Gregory Wiet

*Ohio State University Medical Center*

# Don Stredney

*Ohio Supercomputer Center*

The Virtual Temporal Bone Project – the brainchild of Don Stredney, director of the interface laboratory at the Ohio Supercomputer Center and Dr. Gregory Wiet, associate professor of otolaryngology at Ohio State University – is a computer simulation design that enables residents to practice procedural techniques used in surgery sans the risk.

Wiet, who also serves as the residency program director at Nationwide Children's Hospital, says he always has had a passion for educating residents and enhancing their surgical training.

He works in harmony with Stredney, who is devoted to computational interface and simulation technology. The two have been working together since 1993, harnessing the power of computational science to address some of the surgical training issues that exist in otolaryngology, that deals with ears, nose and throat care.

"I think the real issue here is the application of this type of technology in an area (of medicine) that really has not changed its methodology (in terms of) training and teaching in probably 100 years," Wiet says. "With the impact simulation technology, people in training can practice and learn particular surgeries in a nonthreatening environment and can practice much more often."

**G. Wiet:** Children's Hospital

**D. Stredney:** Ohio Supercomputer

The biggest challenge with the project, which is supported by a grant from the National Institutes of Health, is convincing others to embrace it, says Stredney, who also works as an instructor in the department of otolaryngology at OSU.

"The good news is that the simulation of surgery is not trivial," he says, explaining that residents who use it can interact with the temporal bone using virtual surgical instruments, giving them a sense of the procedure. "You get the feel just as you would in the operation room," Stredney says.

– **SCOTT RAWDON** for *Columbus Business First*