

## Another dimension

*Professor, LRC collaborate to enhance learning experience*



By Janet Larsen

The college is adding a “new dimension” to learning.

In the past, students could build and inspect physical models of drugs using a kit that was like a scientific version of Tinkertoys™. While these kits were useful for learning about small molecules, they were unable to capture the complexity of how drugs interact with much larger protein-based receptors.

Understanding how the structure of a drug affects its function, known as the structure-activity relationship, is part of the foundational knowledge of every pharmacist. Finding educational tools to conceptualize these interactions, however, has been challenging.

Previously, Dr. Walt Fast, associate professor of medicinal chemistry, used computers to display three-dimensional projections of molecules in the pharmacotherapy course sequence. The students wore old-fashioned, cardboard 3D glasses to see the images, and the classroom looked like a scene from a 1950s movie theater.

“Using the red and blue glasses to look at drugs in 3D was fun. It helped students visualize, understand and remember the material,” said Fast, citing numerous student comments. The old technology; however, has limitations.

To overcome these drawbacks, Fast teamed up with Dr. Sean Kerwin, associate professor of medicinal chemistry, and the pair was awarded a recent College of Pharmacy Faculty Educational Innovation (FIE) Grant to bring this technology into the new millennium.

By combining course fees with the grant, the college’s Learning Resource Center (LRC) designed and constructed a mobile 3D console that brings modern stereographic display technology to the classroom. Kamran Ziai, director of the LRC, and Oliver Gomez, senior systems administrator in the

LRC, led the project.

A recent demo of this console to the college’s Academic Support Committee was considered a success when attendees wanted to reach out and touch the molecules.

Current plans are to phase in the technology during the Fall 2011 medicinal chemistry lab course, but potential applications for public outreach, Explore UT events, and other professional courses are being actively discussed.

“We are lucky to have the faculty and the dean who strive to bring the latest technology that complements the high quality instructions at our college,” said Ziai. It is exciting to be part of this movement.”

### *Pair named as Walmart Scholars*

Sofia Mnjoyan, a third-year pharmacy student, and Dr. Ken Lawson, associate professor of pharmacy practice, are among 75 student-faculty pairs named to the 2011 American Association of Colleges of Pharmacy (AACP) - Walmart Scholars Program.

The program provides \$1,000 travel scholarships to 75 student-faculty pairs from AACP member institutions to attend the AACP Annual Meeting and the AACP Teachers Seminar in San Antonio from July 9-13, 2011.

AACP and Walmart share the commitment to help colleges and schools of pharmacy ensure there are an adequate number of well-prepared individuals who aspire to join the faculties of our expanding programs across the country. The goal of this scholarship program is to strengthen the recipient’s skills and commitment to a career in academic pharmacy through participation in programming and activities at the 2011 AACP Annual Meeting and Seminars.