Measured Risks

The older the victim of a fall is, the more serious the effects of that fall become. A broken hip for a 30-year-old may be devastating, but for an 80-year-old, it may precipitate an early death.

That reality does not sit well with physical therapist professionals like Professor Brad Stockert. Having worked with his share of fall victims, Stockert says that with proper exercise and education, prevention can forestall the need for rehabilitation. That belief has fueled Stockert's work on a testing system that can identify people at risk for balance problems before they become fall victims.

Stockert explains: “The tests currently in use are not sensitive enough to pick up the beginnings of a balance issue, nor can they adequately measure and track progress. The STAR Test may. Armed with empirical evidence, health professionals will be better able to assess the risk of falling and prescribe preventive therapy.”

The STAR Test consists of lines intersecting a center spot, each line marked in increments akin to large rulers on the floor. Standing in the center, the test subject reaches with his or her big toe as far as possible along the lines without losing balance. The “reach” is then recorded and charted. Combined with other tests and careful questioning, the results can help the therapist identify potential problems and design individual exercise programs to forestall them.

“Increased strength and confidence in one’s balance can not only prolong life, but enhance its quality,” asserts Stockert.

To validate his test, Stockert enlisted the help of the campus’ Renaissance Society members to serve as his control group. What he found in them, he says, was a “gold standard” for older adults. Ranging in age from 60-85, they represent the changing faces of aging in America. Alert, energetic and educated, these are seniors whose agility and continued level of activity support the theory that fall risk can be mitigated. (The Renaissance Society provides a Learning-in-Retirement community at Sac State. Its 700-plus members present and participate in a wide-range of panels, studies and seminars on campus.)

This fall semester, Stockert will once again work with physical therapy graduate students who will be administering the STAR Test and traditional balance tests. Using volunteers from the Renaissance Society and from the LIFE Center (see page 8), they will assess each person's risk of falling and then track the long-term progress of their subjects. Stockert expects to validate the STAR Test as an evidence-based model that will support preventive physical therapy for those at risk. Results from the study will also be used to support grant applications for further research in this area.