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EXERCISE THAT FEELS LIKE PLAY



STORY BY
**SARA
WRIGHT**
BLUFFTON TODAY



PHOTOS BY
**STEPHEN
BEREND**
BLUFFTON TODAY

The yoga instructor is tall, fit and brutally honest. If the one-legged pose gets the better of you and you step off the balance board, well, better luck next couch potato. Sweating, frustrated, smiling — but determined to get it — you back onto the white plastic rectangle to master the skill, win, do better, improve. a run at hula hoop leaves a desire to do again, only this time better, faster, and more perfect form.

Wii Fit brings out the child's love of repeating what's fun so well illustrated by PBS Teletubbies refrain, "Again, again!" And it's this desire to repeat that physical therapists are counting on to help their patients recover and function well. Most video games are a bit addictive, but Nintendo's Wii Fit comes with all the benefits of exercise, and even some of the risk. Heck, it is exercise.

"My sister boxed (on Wii Fit) for 30 minutes and she could barely move her arms," said Lynn Randall, the program coordinator for inpatient rehabilitation at Coastal Carolina Medical Center. She said she followed Nintendo's U.S. Wii Fit release in May, watched a story on the

Evening News about how the program is used in nursing homes throughout the "I thought, 'Good, Lord. If they can, then we she said. Wii Fit will launch as part of the hospital's rehabilitation program in August, patients are already asking her every day they can try it.

Researchers at the University of South are among those now studying whether Nintendo's Wii Fit and PlayStation's EyeToy benefit physical therapy patients. "A lot of are using this, especially the Wii. That was part of the impetus for our study — a lot of people are using it, but we don't know if it works," said Stacy Fritz, a clinical assistant professor of physical therapy in the exercise science department of UCS's Arnold School of Public Health. She's a lead researcher of two studies of physical therapy on chronic stroke patients — one evaluating the Wii Fit and EyeToy as therapy.

Fritz received \$112,000 of \$2 million in funding from the Robert Wood Johnson Foundation for 12 different research projects around the nation. The foundation's grants are through its Health



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Games Research Program, headquartered at the University of [California, Santa Barbara](#). After a stroke, the brain must find new neuropathways to communicate what used to be second nature, such as balancing or walking. It's called unmasking. "Imagine you're driving down a thoroughfare, and the main way is blocked you have to detour. It may not be as efficient or fast, but it does work," Fritz said.

In her experience, physical therapy can work improvements more than a year or two after a stroke. The more times the nerve impulses travel the new route, the wider the road, the faster the message. But getting clients to repeat exercises that are difficult, boring or painful has earned physical therapists the joke nickname "pain and torturers." Fritz said she already predicts that the games will make a difference in compliance — how willing the patients are to do the exercises. Her team scheduled the patients sessions in the lab to keep compliance a constant.



"At this point we're not really testing compliance, we're testing the game. The intervention is very clean so we can say, 'Does it make a difference?' We think it will with balance, walking ability, fear of falling — that's a big issue with people with strokes," Fritz said. Falling is a big issue, period. In the [United States](#), one of every three people aged 65 years and older falls each year. Among older adults, falls are the leading cause of injuries, hospital admissions for trauma, and deaths due to injury. Physical Therapists Sandy and Tim Dorian own the Physical Therapy Center on Hilton Head Island.

They recently installed Wii Fit and a large projector in their clinic, and already they see their clients motivated to work harder as they develop balance, strength and function. Howard Shoemaker, 73, had knee replacement surgery last year. He arrived early for 3 p.m. appointment at the Physical Therapy Center on Monday. He'd tried the Dorians' Wii Fit on Saturday, playing 18 holes of virtual golf, and he could hardly wait to play more. As Shoemaker teed up, Dorian put a rectangular blue balance beam-shaped bolster under his feet, so his leg muscles had to work hard to stabilize him while he putted.

Sandy Dorian said that Wii Fit helps clients build strength using motions that mimic real life more realistically than traditional exercise machines too. "Our focus is function. You need to provide your body with different challenges. Your body never loses the capacity to gain strength," she said. When Shoemaker first had his surgery, his doctor told him "no golf," Dorian said. Other clients are told they can't play tennis during recovery. Using Wii Fit, the Dorians can help transition clients back into both sports by playing them — under their supervision, and without resistance. And for the clients, it's a chance to play while they heal.

CHECK IT OUT ONLINE

See the Wii Fit in action at blufftontoday.com/video

Wii Fit; We spent

Getting set up will run about \$250 for the Nintendo Wii console, and \$170 for Wii Fit with Balance Board, more for extras such as other games and accessories.

Participate in USC chronic stroke studies

Researchers at the University of [South Carolina](#)'s Arnold School of Public Health are recruiting

participants for two different studies while helping stroke victims improve their balance and recover motor skills. The first, funded by the Robert Wood Johnson Foundation, will evaluate the effectiveness of Nintendo Wii Fit and Play Station Eye Toy. The 1 ½-year study will begin in August, or early September. The second, funded by the American Heart Association, will study the brain using an MRI during physical therapy.

Participants should be otherwise-healthy patients who've had a stroke more than 6 months ago. They won't be paid, but will have physical therapy throughout the study for no charge. Contact University of **South Carolina** by phone at 803-777- 2627, or e-mail at rehablab@gwm.sc.edu. For more info, visit <http://sph.sc.edu/dpt/dpt-rehab>.

Learn more about the Physical Therapy Center and Wiihabilitation: 681-5900 or www.hiltonheadpt.com

