



NATHAN LINDSTROM : FOR THE CHRONICLE
TRYING IT OUT: With guitar in hand, music therapist Anne Daleiden, left, and Dr. Ron Tintner at the Methodist Neurological Institute work with Parkinson's patient Howard Tomlinson, shown with his wife, Joy.

Parkinson's study tries 'neurobiology of music'

■ **Researcher wants to know which beats help patients improve movement**

By **PATRICK KURP**
HOUSTON CHRONICLE

Howard Tomlinson and his wife of 57 years, Joy, recently returned from an 11-day Caribbean cruise, with stops in Panama and Costa Rica.

The Katy couple always have enjoyed dancing, though since the onset of Parkinson's disease about four years ago, Howard Tomlinson's capacity for cutting a rug has been somewhat diminished.

"The music just makes you want to move. We've danced all over the place. You know: Harry James, country-western, waltzes, the two-step. You can always move if you have the right music," said the 80-year-old Tomlinson, a retired electrical engineer.

Dr. Ron Tintner, a neurologist at the Methodist Neurological Institute and its Movement Disorders Clinic, hopes Tomlinson's assessment of the link between music and movement proves correct.

He has launched a clinical study of music and its potential for improving motion in Parkinson's patients.

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■ **Info:** For more about this study, including enrollment, call 713-441-5611.

"Music is a biologically mandated function. We know it makes people move. The big question for us is, are there particular rhythms that work better for these patients? Which acoustic stimuli will help Parkinson's patients move and function better?" said Tintner, himself a musician who plays piano and guitar.

With the aid of a \$25,000 grant from the Grammy Foundation — part of The Recording Academy, the organization that presents annual music awards — Tintner is researching the sorts of music most helpful for Parkinson's patients. The ultimate goal is to develop personal audio devices that could help patients overcome the "freezing" they often experience.

"What we're studying is the neurobiology of music," Tintner said.

Parkinson's disease is a progressive neurological disorder caused by the loss of dopamine-producing brain cells. The principal symptoms are tremors, rigidity, slowness of movement, and impaired balance and coordination. In the U.S., some 500,000 people have been diag-

nosed; about 50,000 new cases are reported annually.

For the first phase of the trial, Tintner will study people without Parkinson's, to assess which sorts of music most stimulate them. He then will test the preliminary results on people with the disease.

Tomlinson has enrolled in this portion of the study.

Participants will be watched by supervisors trained to notice bodily changes, videotaped and electronically monitored to record physiological changes.

About five years ago, Joy Tomlinson noticed her husband was shuffling, losing energy and experiencing increased difficulty feeding himself. The average age of the onset of Parkinson's is 60, and Tomlinson already was 75. After seeing several doctors, he was diagnosed with the disease by Tintner, who prescribed medications to replenish the dopamine in his brain.

Tomlinson felt strong enough to undertake the extended cruise, and even went ashore three times.

"Maybe what the doctor's doing won't help me, but if I can do something to help other people, that'll be a good thing," Tomlinson said.

For questions or comments on the Health & Medicine page, contact matthew.schwartz@chron.com.

