Hands-on science. Steve Johnson of Denver does a little research on 'smart gel' Saturday during the technology expo at Epcot.
LAKE BUENA VISTA — When Jay Schiller lost his left forearm and hand to an electrical accident 10 years ago, he thought he would never play the saxophone again.

Today, there is hope.

As a test subject for a revolutionary bionic arm called the Tendon Activated Pneumatic hand, Schiller showed off the device Saturday by playing parts of Mary Had a Little Lamb on a keyboard at Walt Disney World’s Epcot park.

And it was all thanks to science.

"Hoping individual fingers may someday give me that opportunity again to play the saxophone," said the 28-year-old Princeton, N.J., chemist. "Someday, it’s a possibility."

The artificial hand uses arm muscle and tendon movements to send pulses to a computer, which activates individual fingers on command. It was invented by Rutgers University biomedical engineer Bill Crandall, whose device was one of two dozen high-tech gadgets on display Friday and Saturday at the Discover Magazine Technology Expo.

The device was among the finalists in nine categories for innovation in science, medicine, technology and entertainment. Winners from the past 10 years also were showcased.

The latest inventions ranged from "smart gels" that can aid in absorbing and later recycling oil spills, to "smart toys" such as Lego Mindstorms' programmable and toy robot kit currently in stores.

Please see EXPO, B-