



The Stroke I.M.P.A.C.T. Study

NEWSLETTER

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New Year ~ New Compliance Device

The Stroke I.M.P.A.C.T. Study introduced a redesigned compliance device that is used with the constraint-induced therapy mitt. To date, subjects who have received CIMT as part of I.M.P.A.C.T. or one of the previous research studies, wore a compliance device in the mitt resembling a black plastic case approximately the size of a deck of cards attached by wire to a 4"x7" sensor pad inside the mitt. The compliance device measures the amount of time a subject wears the CIMT mitt.

In an effort to streamline the equipment and make it more reliable, I.M.P.A.C.T. Coordinator, Fran Greenberg, enlisted the help of the University of Florida engineering department's Karl Gugel, Ph.D. Greenberg met with Dr. Gugel last summer to explain the equipment and the desired improvements. Dr. Gugel determined the project would make a perfect senior project for his computer engineering students and selected two top students to handle the redesign.

UF engineering students Michael Rewak and

Sarit Patel, both of whom graduated last month, made the following improvements to the compliance device: The sensor was reduced to the size of a quarter, fitting comfortably and inconspicuously in the small wrist cushion on the mitt's strap. The actual device with the LED readout of the time was reduced in weight by nearly 300%. The new device is a slim circuit board that fits into a nylon pouch, which also attaches to the mitt's strap. The new device measures time in hours, minutes and seconds, whereas the old device was accurate only within 20 minutes.

The new device also uses far less energy. "With the old device we had to use a new 9-volt battery for every subject," said Greenberg. "It was a wasteful process which required us to toss batteries after each subject's two week training because we couldn't risk the battery running out before we noticed. So we used a new one each time." The new device uses 3 volt lithium coin batteries which are expected to last for up to three training participants.

Improving Motor Performance Applying Constraint Therapy



University of
South Carolina

Way to Go Gators!



University of
Florida

National Champs



Colorado State
University



UF Reaches Unrivaled Athletics Success

The University of Florida football team beat Ohio State 41-14 on January 8th to claim the national title. The college sports universe now revolves around Gainesville, now known as Tittletown. Never before has a school held national championships in both basketball and football at the same time. The UF athletics department has never been higher. Most schools can only dream of a championship in either sport, let alone win both in the same calendar year. *(Reprinted from the Florida Alligator 1/11/07)*

What is NIH and what does it mean to I.M.P.A.C.T.?

The National Institutes of Health (NIH), a part of the U.S. Department of Health and Human Services, is the primary Federal agency for conducting and supporting medical research. Helping to lead the way toward important medical discoveries that improve people's health and save lives, NIH scientists investigate ways to prevent as well as the causes, treatments, and even cures for common and rare diseases. NIH research impacts: child and teen health, men's health, minority health, seniors' health, women's health, and wellness and lifestyle issues.

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
National Institutes of Health

Composed of 27 institutes and centers, the NIH provides leadership and financial support to researchers in every state and throughout the world. This includes the Stroke I.M.P.A.C.T. Study. In 2004, Principal Investigator, Dr. Kathy Light, along with Co-PI's Dr. Matthew Malcolm and Dr. Stacy Fritz were awarded an NIH grant to research the parameters of Constraint Induced Movement Therapy. The grant represents the budget available to pay for the research personnel, materials and equipment used in The Stroke I.M.P.A.C.T. Study.

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