



# MADONNA

## Rehabilitation Hospital

July 13, 2012

FOR IMMEDIATE RELEASE

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Madonna Rehabilitation Hospital partners with SportsArt Fitness, Inc., for ICARE global sales

*Lincoln, Neb.* – Madonna Rehabilitation Hospital has partnered with SportsArt Fitness, Inc., a leading manufacturer of professional grade fitness equipment, to launch international distribution of the hospital's Intelligently Controlled Assistive Rehabilitation Elliptical Training System (ICARE).

The SportsArt ICARE will include parts manufactured by SourceOne in Lincoln, generating a positive economic impact to Nebraska.

For individuals who have experienced a stroke, brain injury, Multiple Sclerosis or other disabling condition, regaining the ability to walk and improving overall conditioning are important rehabilitation goals. Expensive robotic gait devices can help accelerate a person's ability to achieve these goals, but at a cost of \$350,000 or more, they are not readily available outside of a specialized rehabilitation hospital.

Unlike a typical elliptical, the ICARE offers powered support so it is easier for people with weakness and/or limited mobility begin and maintain exercise in a walking-like pattern. The motorized control has a sensor that adjusts the level of support during exercise, so if a person needs more support, the power automatically increases, as the person needs less support, the motorized power decreases.

Led by the director of Madonna's Institute for Rehabilitation Science and Engineering, Judith Burnfield, PhD, PT, researchers spent three years developing the ICARE in collaboration with co-investigator Carl Nelson, PhD, from the Department of Mechanical and Materials Engineering the University of Nebraska-Lincoln and SourceOne custom manufacturing. Madonna's research team also partnered with NUtech Ventures,



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an affiliate of the University of Nebraska-Lincoln that connects researchers to the private sector, to commercialize the ICARE.

During their studies, Madonna researchers discovered the E872 elliptical trainer by SportsArt Fitness most closely replicated a natural walking pattern compared to others in the study, making it the most suitable for a gait assistance device.

Terry Brown, president of SportsArt America, Inc. commented, "When we heard they were using our elliptical, we felt it was something we should be involved with on a higher level. Our factory in Taiwan was equally impressed with the concept and a partnership was born. We

**Leadership team photo with ICARE (left to right):**

- Prem Paul, Vice Chancellor for Research and Economic Development University of Nebraska–Lincoln
- Marvin Jaques, Senior Technology Agent, NUtech Ventures
- Judith Burnfield, PhD, Director, Institute for Rehabilitation Science and Engineering, Madonna Rehabilitation Hospital
- Paul Kuo, President, SportsArt Industrial Co., LTD
- Terry Brown, President, SportsArt America, Inc.
- Marsha Lommel, President and CEO, Madonna Rehabilitation Hospital

are very excited about what this product will do for the rehab community around the world."

"The people at Madonna do the work of angels. We were extremely impressed with how they are using our elliptical in a new way to provide solutions for people

who are struggling with physical limitations," said Paul Kuo, president of SportsArt Industrial Co., LTD. "We are so happy to help them with this work. We will have a long and successful partnership."

Marsha Lommel, president and CEO of Madonna Rehabilitation Hospital said, "The ICARE is the result of incredible collaboration, especially with the University of Nebraska. Dr. Judy Burnfield with Madonna's Research Institute is not only a brilliant scientist, she's also a talented leader who brings the best out of a diverse team of researchers, business partners, academicians and clinicians."

The ICARE includes many beneficial features, such as an adjustable height seat, overhead body weight support system, ramp, wheelchair platform, clinician platform, modified foot pedals, stairs and grab bars that greatly increase accessibility for individuals who are weak, deconditioned, or who have balance problems.

The ICARE will be sold throughout the U.S. and 80 countries internationally.



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More information about the ICARE is available at <http://www.sportsartamerica.com/icare> or call 800.709.1400 x201.

Learn about other Madonna Research Institute projects at [http://www.madonna.org/research\\_institute/](http://www.madonna.org/research_institute/).

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Madonna Rehabilitation Hospital is one of the nation's foremost facilities for medical rehabilitation and research. Specializing in traumatic brain injury, spinal cord injury and pediatric rehabilitation, Madonna offers hope and healing to thousands of patients from throughout the country each year.

Madonna's team of highly specialized physiatrists, therapists, rehabilitation nurses, clinicians and researchers work with the most advanced technology and equipment to help each person achieve the highest level of independence.

Madonna Rehabilitation Hospital is located at 5401 South Street in Lincoln, Nebraska, 68506; 402-489-7102; [www.madonna.org](http://www.madonna.org).