

9-8-2009

## New therapy helps stroke patients walk again, regain hand control

University of Montana--Missoula. Office of University Relations

Let us know how access to this document benefits you.

Follow this and additional works at: <https://scholarworks.umt.edu/newsreleases>

---

### Recommended Citation

University of Montana--Missoula. Office of University Relations, "New therapy helps stroke patients walk again, regain hand control" (2009). *University of Montana News Releases*. 21893.  
<https://scholarworks.umt.edu/newsreleases/21893>

This News Article is brought to you for free and open access by the University Relations at ScholarWorks at University of Montana. It has been accepted for inclusion in University of Montana News Releases by an authorized administrator of ScholarWorks at University of Montana. For more information, please contact [scholarworks@mso.umt.edu](mailto:scholarworks@mso.umt.edu).



---

**NEWS RELEASE**

---

Sept. 8, 2009

**Contact:** Kay Woodworth, community education manager, St. Patrick Rehabilitation Center, 406-327-3228, [kwoodworth@saintpatrick.org](mailto:kwoodworth@saintpatrick.org); Susan Ostertag, physical therapist, UM New Directions Wellness Center, 406-243-6120, [susan.ostertag@umontana.edu](mailto:susan.ostertag@umontana.edu).

**NEW THERAPY HELPS STROKE PATIENTS  
WALK AGAIN, REGAIN HAND CONTROL**

**MISSOULA—**

St. Patrick Rehabilitation Center and The University of Montana's New Directions Wellness Center offer new treatment options to improve hand and leg function for patients suffering from upper- and lower-extremity paralysis caused by central nervous system injuries or disease.

The NESS H200® Hand Rehabilitation System and the NESS L300™ Foot Drop System use functional electronic stimulation, which has been shown to improve hand and leg function in many people recovering from stroke, traumatic brain injury, multiple sclerosis, cerebral palsy and incomplete spinal cord injury.

"We are excited to be among a select group of facilities in the country to offer these treatment systems," said Jana Knor, program director of St. Patrick Rehabilitation Center. "These systems accelerate and complement traditional therapy – maximizing patient rehabilitation."

New Directions Wellness Center and St. Patrick Rehabilitation Center will host a Bioness® Screening Day from 9 to 11:30 a.m. Tuesday, Sept. 22, at the Missoula Senior Citizens Center. The public will hear about this new technology, watch current patients demonstrate the systems and learn about home use.

The NESS H200 Hand Rehabilitation System is easy to use and has been shown to facilitate return of hand function in patients following stroke and brain injury, as well as in select patients whose



injuries are older. It consists of a polymer fitting that rests over the patient's hand and forearm. The fitting has five embedded surface electrodes that, on command, stimulate the muscles of the hand and wrist to extend and flex. A separate control unit allows the clinician to program the system with a series of exercises customized for each patient. The system can be used in the inpatient and outpatient setting, or can be self-administered in the home.

The NESS L300 Foot Drop System is wireless, low profile and lightweight. The system has three components: a gait sensor worn in the shoe, a wireless stimulating leg cuff worn below the knee and a clinician-programmed control unit. When the gait sensor detects "heel off," it sends a message to the leg cuff, which then stimulates the leg muscles to lift the foot, allowing patients to achieve a more normalized walking pattern on changing terrains and at varying speeds.

"We endorse both systems, because both are easy for the patients to use, as well as the clinicians," said Sue Ostertag of New Directions Wellness Center. "The systems are programmable, can be used on multiple patients and can be used in the home. It allows us to improve patient outcomes, giving them more function, more freedom and more life."

###

KW/bd  
Local, state  
090809well