



NEWSLETTER

January 2007

NO BARRIERS FESTIVAL 2007 will feature a “Technology Meets Physical Disability” Symposium

*Learn about Innovative Technologies
and Techniques that will Change Your Life!*



The Brain Port The Rheo Knee The Power Knee

Aimee Arnoldussen of Wicab will be demonstrating an amazing device called **BrainPort**, developed by Wicab, Inc. which some day may help blind people to “see”. This patented technology consists of a postage stamp size tongue display, a control box and a video camera. Visual information is collected from a head mounted video camera and sent to a control box. The control box translates the visual information into an electrical pattern for display on the tongue.

Hilmar Janussen, VP of Ossur will be presenting two new innovative prosthetic knees – **The Rheo Knee®** and the **POWER Knee**.

The RHEO KNEE® is the world’s first microprocessor swing and stance knee system to utilize the power of artificial intelligence. Capable of independent thought, it learns how the user walks, recognizing and responding immediately to changes in speed, load and terrain.

The world’s first powered bionic prosthesis for above-knee amputees, **the POWER KNEE** offers unprecedented levels of functionality and performance. This bionic knee replaces true muscle activity to bend and straighten the knee as required.

On behalf of the No Barriers Board of Directors, members and staff, we are pleased to welcome you to NO BARRIERS FESTIVAL 2007, Squaw Valley, California. This year’s symposium program should prove to be both exciting and stimulating. We have a number of world renowned speakers presenting, representing prominent foundations, universities and manufacturers all conducting research in the area of physical medicine and rehabilitation. The principal aim of the NO BARRIERS FESTIVAL 2007 Symposium and Equipment Fair is to facilitate knowledge exchange between people with disabilities and those who create assistive technologies, thus fostering cooperation between them, and improving the efficacy of current rehabilitation approaches.

Technology has made important improvements in the lives of physically challenged people in the past 25 years. This is a good time to look back and reflect upon the accomplishments of the past and to dream about what might come in the future. Whether you are a technologist, scientist, or the end user of assistive devices, this year’s event offerings are essential. Thank you for sharing your time to move assistive technology forward so that we might all contribute to a future without barriers or restrictions.

Noted presenters will include:

- BrainPort Vision Device - Aimee Arnoldussen, Ph.D.
- Wayfinding Technology for the Blind - Michael May, Ph.D.
- Powered Ankle Prostheses - Hugh Herr, Ph.D.
- Adaptive Knee Prostheses - Hilmar Janusson, Ph.D.
- Neural-Controlled Upper-Extremity Prostheses - Richard Weir, Ph.D.
- Optimizing the Soft Tissue Seal of a Percutaneous Device - Jeffrey Morgan, Ph.D.
- Overview of Wheeled Mobility Systems - Rory Cooper, Ph.D.
- Wheeled Vehicles that Balance - Jerry Kerr
- Powered Exoskeletons to Assist Limb Movement - Homayoon Kazerooni, Ph.D.
- Exploiting the Natural Adaptive Capacity of the Nervous System for Motor Learning & Rehabilitation - James Patton, Ph.D.
- Perspectives on Neuroprosthetics from the View of a Neuroscientist and User - Alexander G. Rabchevsky, Ph.D.
- Challenges and Innovations in Rehab: Functional Electrical Stimulation in Evidence Based Practice - Yitzhak Zilberman, Ph.D.
- Oscillating Field Stimulation for Spinal Cord Repair - Jessica Duda

BrainGate: From Thoughts to Movement - Leigh Hochberg, M.D. and Ph.D.
Individual Design - Ted Selker, Ph.D.
Design for People - Kat Darula

We invite you to learn more about No Barriers USA and Festival 2007
Visit our **newly updated website** - www.nobarriersusa.org
or telephone 415-381-4160

NO BARRIERS FESTIVAL 2007 Partners

Alpine Skills International – California Physical Therapy Association – Challenge Aspen – Challenged Athletes Foundation – Disabled Sports USA - Disabled Sports USA Far West – DRAFT - Environmental Traveling Companions (ETC) - Gonda Climb-A-Wall – Guide Dogs for the Blind - No Limits – National Sports Center for the Disabled - Squaw Valley Adventure Center – The Valley Medical Center Foundation – PlumpJack Squaw Valley Inn – Squaw Valley USA - The Village at Squaw Valley USA