Robotic exoskeletons to be demonstrated by everyday users at No Barriers Summit

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Mitch Brogan and Amanda Boxtel demonstrate the Rex and Ekso robotic exoskeletons that allow them to stand up out of their wheelchairs.

Exoskeletons – originally designed as a wearable robotic suit to allow soldiers to lift heavy loads and walk farther – are now available to help people with disabilities step out of wheelchairs and stand upright. At the No Barriers Summit in Telluride, Colo., August 8 – 11, exoskeleton users Amanda Boxtel and Mitch Brogan, along with Bridging Bionics Foundation President Russ Angold, will demonstrate three different examples of this state-of-the-art robotic technology.

"We are extremely excited to showcase different types of exoskeleton

systems at this year's No Barriers Summit," said Dr. Sasha Rabchevsky, a No Barriers USA board member and himself a paraplegic. "These ground-breaking, adaptive prosthetic devices will be demonstrated on stage by spinal cord injured pioneers who will share their remarkable stories of triumph with audience members."

Injured in a ski accident in 1992 that left her paralyzed from the waist down, Amanda Boxtel has become an advocate for people with disabilities. She co-founded Challenge Aspen in 1995 and subsequently became the first paraplegic hired as a professional ski instructor at Aspen Skiing Company and a professional speaker. She currently serves as Executive Director for the Bridging Bionics Foundation. In 2010, Boxtel also became the first female paraplegic to test Ekso, then known as eLEGS, for maker Ekso Bionics. With the help of the aluminum and titanium battery-powered device, she is able to walk almost naturally, as she will demonstrate at the No Barriers Summit.

Mitch Brogan was injured in 2006 in London when his bicycle was struck from behind by a drunk driver, breaking his spine and leaving him without the use of his legs and with no functional use of his hands. But thanks to another exoskeleton, this one a pair of robotic legs made by Rex Bionics in Auckland, N.Z., and known as Rex, Brogan was able to walk again and went on to become the first quadriplegic to achieve the ability to operate bionic exoskeleton legs for independent use, including Rex and Ekso. In 2011, Brogan founded 456 Boler Road Inc., the first private, live-in robotics therapies facility in North America.

The third exoskeleton to be shown at the Summit, the HULC – or Human Universal Load Carrier – was originally developed by Ekso Bionics and is currently under development by Lockheed Martin for the military and industrial use, demonstrating a different direction for the remarkable bionic suit technology. It will be presented by Russ Angold, who, in addition to serving as president of Bridging Bionics Foundation,

is an engineer and co-founder and Chief Technology Officer for Ekso Bionics, where he formerly served as vice president of engineering.

More information: nobarriersusa.org/summit/