



Category: Industry

Workshop Title: The Spectrum of Gait Training

Workshop Organizer(s): Jake Kee

In person Speaker(s):

Kee, Jake, Fourier Intelligence

Dufault, Lukas, KINESIQ Inc.

Workshop Time: 08:15 - 09:45

Attendee Engagement:

Hands-on time +/- discussion rounds

Abstract:

Fourier Intelligence RehabHub™ is a total solution consisting of comprehensive, advanced rehabilitation technology, including robotics therapy, neuromodulation, sensor technology, virtual reality, and functional electrical stimulation. This concept allows a complete solution to enable the patient to be engaged and undergo high-efficiency, quality rehabilitation training throughout the stages of rehabilitation.

Many studies have supported early intervention gait training. We will showcase early gait rehabilitation via a comprehensive exoskeleton with a dynamic body-weight support system. Once the patient has regained muscle tone, overcome their postural weakness, and reduced their abnormal gait patterns, they can independently utilise an exoskeleton or a body weight frame. From there, we can progress to simulate real-life scenarios in preparation for returning to society.

Due to the modularity of the RehabHub™ devices, each device can be used on its own or together with the other devices, depending on the patient's needs. The devices can provide a "task-specific" rehabilitation with repetitive training to improve the patient's functional ambulation post-injury. The devices also play a role in creating personal and environmental constraints that support self-produced functional actions. These devices are also suited for the elderly trying to regain their balance, prevent falls, and regain their functional capacity to walk up hills or stairs.

Join us as we showcase a few devices from the RehabHub™ suite of solutions that Fourier Intelligence produces, intending to create a rehabilitation ecosystem that empowers human ability.