

Category: Industry

Workshop Title: Neuroskin: an AI-powered neuroprosthesis for gait rehabilitation after stroke

Workshop Organizer(s): Rudi Gombauld

In person Speaker(s):

Lana Popovic Maneski

Workshop Time: 10:30 - 12:00

Attendee Engagement:

• How we can use in FES in Neurorehabilitation clinical routine and evaluate patient improvement gait status

• Attendees will be given an opportunity to test the Neuroskin during the workshop

Abstract:

The purpose of Kurage is to support in the acute and sub-acute phase the gait rehabilitation of post stroke patients.

Our NeuroSkin Solution was designed to help increase mobility for patient living with a variety of neurological disease , includes strokes, cerebral palsy and multiple sclerosis

Our Neuroskin Solution is a neuroprosthesis that we like to name a second skin (legging for the lower body), equipped with IMU and GRF sensors as well as FES dry electrodes, driven by artificial intelligence capable of reproducing functional movements in a personalized way to overcome the deficiencies of the sensory-motor loop of the user.

Our ambition is to spread the awareness and application of multi-channel FES for gait by solving at least two of its major barriers:

- complexity of donning and positioning: because of the large number of electrodes and cables in multi-channel FES applications
- complexity of setting personalized parameters: for each patient to obtain optimal effects