



Category: Virtual Rehabilitation

Workshop Title: Latest innovative treatment methods to improve hand function in Parkinson's disease

Workshop Organizer(s): Tim Vanbellingingen

In person Speaker(s):

- Prof. Dr. Vanbellingingen Tim, University Bern
- Dr. Adelsberger Rolf, Sensoryx AG

Virtual Speaker(s): Yes- Dr. Erwin van Wegen/Prof. Tobias Nef/Dr. Pastore-Wapp

Workshop Time: 16:00 - 17:30

Attendee Engagement:

We plan an highly interactive 90 min. workshop. The latest technology (VR/AR) equipment and Sensor based instruments will be available, so hands-on time is planned. In addition, we plan mentimeter online quizzing, so people who are virtually participating may also benefit from these quizzes. A final discussion round (10 min.) rounds off this workshop

Abstract:

Parkinson's disease (PD) is one of the most common progressive neurodegenerative diseases worldwide, and being the fastest growing neurological disorder in the world. PD typically affects the patient's activities of daily living (ADL), quality of life (QoL) in all stages of the disease. Patients with PD suffer from significantly decreased coordination and have difficulties with precise hand/finger movements during the performance of both basic ADL such as dressing, grooming as well as higher ADL such as cooking, shopping, regular medication intake.

Besides traditional rehabilitation such as physical therapy, shown to be effective to improve ADL in PD, newer innovative treatment tools (virtual reality (VR)/augmented reality (AR) and sensor-based instruments may be useful add-on interventions. The present clinical/scientific 90 min. workshop will demonstrate the usability/feasibility of latest VR/AR technology and sensor-based instruments which can be used in clinical practice to improve hand/finger movements in PD. Speakers include a movement scientist, an Engineer, a physical therapist and a clinical neuroscientist