5th Congress on NeuroRehabilitation and Neural Repair
14-16 May 2025 Maastricht
From science to evidence-based practice

NNR 2025 – WORKSHOPS

Workshop 8: Parkinson rehabilitation

"Bedside assessments and advanced technologies for evaluating upper Limb function in Parkinson's disease"

Organizers:

- **Tim Vanbellingen (CH)** – The effect of upper limb impairments on daily life in individuals with Parkinson's disease (tim.vanbellingen@unibe.ch)
    - VAMED Management & Services Schweiz AG, Research and Innovation, Zürich, Switzerland
    - ARTORG Center for Biomedical Engineering Research, Universität Bern, Gerontechnology and Rehabilitation Group, Bern, Switzerland
- Manuela Pastore-Wapp (CH) – Clinical value of latest technologies to improve dexterity in Parkinson's disease (manuela.pastore-wapp@unibe.ch)
    - Clinic for Neurology and Neurorehabilitation, Luzerner Kantonsspital, University teaching and research hospital, and University of Lucerne, Lucerne, Switzerland
    - ARTORG Center for Biomedical Engineering Research, Universität Bern, Gerontechnology and Rehabilitation Group, Bern, Switzerland
- Nic Krummenacher/Kevin Möri/Rolf Adelsberger (CH) - Novel sensor-based systems to monitor and assess upper limbs in neurological disease (nic.krummenacher@unibe.ch; kevin.moeri@unibe.ch; adelsberger@sensoryx.tech)
    - ARTORG Center for Biomedical Engineering Research, Universität Bern, Gerontechnology and Rehabilitation Group, Bern, Switzerland
    - Sensoryx AG, Zürich, Switzerland

Content: This workshop consists of three engaging sessions. The first session will explore the impact of upper limb impairments on activities of daily living (ADL) in individuals with Parkinson's disease (PD), including a demonstration of reliable and valid bedside assessments. The second session will examine the effectiveness of current upper limb treatments and provide insights into ongoing clinical trials. The third session will focus on cutting-edge sensor-based systems for evaluating and treating fine motor skills. The workshop's learning objectives are threefold. First, participants will gain an understanding of how upper limb impairments affect ADL and quality of life in individuals with PD. Second, they will learn about the most valuable assessments for use in clinical practice. Finally, they will be introduced to the latest clinical trials and advanced sensor-based tools for upper limb assessment and treatment.