



# Digital Technologies for Rehabilitation Gemini Centre

## Launch Event

We are delighted to announce the launch of the newly established Gemini Centre on Digital Technologies for Rehabilitation, a collaboration between SINTEF, NTNU, St Olavs, and University of Oslo. As part of the Centre launch, we have an exciting programme of talks and presentations from clinicians, researchers, patient organisations, and digital technology developers/providers. *The event will be held in-person in Trondheim and online.*

**Friday** 6<sup>th</sup> September 2024, from 08.30 to 12.00.

### Join us...

...**In-person:** Room: [03-059, Helgasetr, NTNU - Øya - MazeMap](#), Vanglunds gate 2, Trondheim.

**PLEASE NOTE: The room can accommodate up to 100 people, so please let us know if you plan on attending in person.** Please contact [mari.gunnes@sintef.no](mailto:mari.gunnes@sintef.no) or [roshan.nair@sintef.no](mailto:roshan.nair@sintef.no) by 30<sup>th</sup> August.

...**Online:** Join Zoom Meeting:

<https://NTNU.zoom.us/j/99401995975?pwd=N3ny4LGPbYNYvInREuSxP3OWozWGee.1>

Meeting ID: 994 0199 5975. Passcode: 183004

### Keynote presentations:

- “How does neuroscience inform the development and use of neurorehabilitation technologies? And how can they become standard clinical practice?” – *Prof Jane Burridge, PhD (University of Southampton, UK)*
- “Digital technologies in aphasia rehabilitation” – *Prof Frank Becker, MD, PhD (Sunnaas Rehabilitation Hospital & University of Oslo, Norway)*
- “Digital Technologies in Neurorehabilitation: Supporting Upper Limb Recovery along the Continuum of Care” – *Prof Olivier Lamercy, PhD (Rehabilitation Engineering Laboratory, ETH Zurich, Switzerland)*

### Technology demonstrations:

- *PPM Robotics, Prof Trygve Thomessen, PhD*
- *Myworkout, Knut Løkke*

Learn more about the Gemini Centre at: [English website](#) [Norsk nettside](#)









**Prof Olivier Lambercy - Rehabilitation Engineering Laboratory, ETH Zurich, Switzerland**

**Digital Technologies in Neurorehabilitation: Supporting Upper Limb Recovery along the Continuum of Care**

**Abstract:** Rehabilitation after neurological injuries faces many open challenges due to the increasing number of patients, the limited number of healthcare professionals and the raising healthcare costs, which ultimately impacts the therapy dose patients receive. Digital technologies could enable a paradigm shift in neurorehabilitation models currently heavily relying on hospital stays/visits. In this talk, I will provide an overview of our work on the development and clinical evaluation of robot-assisted technologies to support assessment and rehabilitation of upper limb function along the continuum of care, from the hospital bedside to the home. I will discuss key enablers and challenges in view of the development and acceptance of such novel digital technologies in neurorehabilitation.

**Biography:** Olivier Lambercy obtained the PhD degree from the National University of Singapore



in 2009 and joined the Rehabilitation Engineering Laboratory at ETH Zurich the same year. Since 2023, he is Adjunct Professor in the Department of Health Sciences and Technology (D-HEST) and the co-director of the Rehabilitation Engineering Laboratory. His research focuses on the development and clinical application of novel technological solutions to improve upper limb assessment, therapy and assistance after neurological injuries. He is a board member of the International Consortium for Rehabilitation Robotics, a member and principal investigator at the Singapore-ETH Center as part of the Future Health Technologies program, a Scientific Advisor to the ETH spin-off AUXIVO, and serves as Associate Editor for the Journal of Neuroengineering and Rehabilitation since 2017.

