



## Psychiatry and Neuroscience Seminar Series 2021



**Pr Yves VANDERMEEREN**

(Host P Lindberg)

*Université Catholique de Louvain - UCLouvain | Institute of  
Neuroscience, Belgium*

## Implementing motor learning in stroke neurorehabilitation

**Friday, October 1<sup>st</sup>, 2021, noon**

R04-45, 102-108 rue de la santé - 75014 Paris & VISIOCONFERENCE

**Pr Yves VANDERMEEREN**

**Head of the Stroke Unit chez CHU Namur, Université Catholique de Louvain - UCLouvain | Institute of Neuroscience,  
Belgium**

Pr Vandermeeren is a neurologist involved in the care of acute and chronic stroke patients and in the study of neuroplasticity after stroke. His research is focused on Neurology, Rehabilitation Medicine and Physiology. In order to validate the potential of non-invasive brain stimulation to induce long-term stable recovery from stroke, our strategy is to test the cumulative effect of restorative stimulation sessions. To test this hypothesis, stroke patients receive real or fake stimulation. Using the 3D motion capture system, kinetic changes in pointing and grabbing movements are monitored to objectively quantify motor recovery and identify different types of movements. The neural substrates underlying motor recovery will be followed longitudinally, using rTMS (transcranial magnetic stimulation) and fMRI (functional MRI) and by comparison between groups (real vs sham noninvasive brain stimulation). We also assess the issue of motor skills learning in patients with chronic stroke, through the use of fMRI and kinetic analysis.

**Keywords:**

Motor Learning

Stroke Rehabilitation

Neuroscience

Brain Imaging

Rehabilitation

Neuroimaging

Motion Analysis

Physiology

Cognitive Neuroscience

Neurophysiology

ZOOM Meeting ID: 884 1181 3983 / Passcode: 112233

LINK: <https://u-paris.zoom.us/j/88411813983?pwd=Y1dte3pJKzhuWmVDL01VS2RkVUVGUT09>

Stay tuned