

GLMS 13 December 2023, 15.00-16.00, Faberzaal

*Presenter:* Dr. Ilse Blokland

**When is fit, fit enough? - The impact of cardiorespiratory fitness on daily-life activities after stroke**

The fraction of cardiorespiratory fitness that an individual needs to perform daily-life activities defines to what extent activities will evoke fatigue, or to what extent a person is forced to perform activities at considerably lower speeds. The cardiorespiratory fitness of individuals after stroke is considerably lower compared to their peers, while the aerobic energy expenditure during daily-life activities is higher after stroke. However, the effect of these limitations on daily-life functioning is unknown. This effect can be studied through assessment of both aerobic energy expenditure during daily-life activities and cardiorespiratory fitness.

In this lecture, the cardiorespiratory fitness of individuals after stroke and its potential influence on performance of daily-life activities is discussed. We will address energy expenditure of daily life activities and discuss movement efficiency and the relationship to movement speed. Furthermore, we discuss cardiorespiratory fitness after stroke, details on cardiorespiratory exercise testing in rehabilitation and the potential impact of cardiorespiratory fitness on movement speed. Lastly, we will address the importance of assessment and training of cardiorespiratory fitness in rehabilitation after stroke to improve functioning.