

Advances in Motor Control Research: Implications for Rehabilitation

Evidence-based treatment for children with cerebral palsy

COURSE DESCRIPTION

This 1-day course, designed for scientists and clinicians, will focus on recent advances in motor control (in particular motor planning) research in children and adolescents with unilateral cerebral palsy (CP). Using a framework to translate research into clinical practice, scientific evidence will be presented and discussed with an emphasis on the implications and possible application of these insights for clinical practice. In particular, recent findings from studies of interventions such as constraint-induced movement therapy and bimanual training will be highlighted, with exploration of what findings are likely to change clinical practice, and what insights are currently needed in clinical practice. Alongside behavioural studies and their implications for clinical practice, this course will also focus on recent research on motor imagery and the use of EEG recording as an experimental and clinical method. This course provides a unique opportunity to update researchers and clinicians on the latest advances in upper limb research in CP and implications for clinical practice.

Detailed course notes and reference material are provided.

COURSE OBJECTIVES

Upon completion of this course, participants will have:

- The latest knowledge on motor control research in children with CP.
- The latest knowledge on motor planning and motor imagery research in children with CP.
- Understanding of the use of EEG measures and its potential for clinical use.
- Understanding of the clinical implications and translation of recent research findings in CP.
- Knowledge of the strengths and weaknesses of current therapeutic approaches to improve upper limb function in CP.
- Knowledge of the future challenges to advance understanding of motor control and implementation in clinical practice.

INSTRUCTORS

Professor Bert Steenbergen (Behavioural Science Institute of the Radboud University, Nijmegen, The Netherlands)

WHO SHOULD ATTEND

Occupational therapists, Physiotherapists, Scientists, Students