

Engineering Neuroscience & Health

Department of Biomedical Engineering

Division of Biokinesiology and Physical Therapy



ENH SEMINAR SERIES



Presents:

Dr. Hans Forssberg

Karolinska Institute

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Monday

September 28, 2009

4:00 p.m.

Refreshments will be served 3–4 pm

“Development of fine motor skills in health and disease”

Hans Forssberg, MD, PhD
Neuropediatrics & Stockholm Brain Institute
Karolinska Institutet
Stockholm

Most everyday activities require the manipulation of objects with the fingertips, an ability that is impaired in several neurodevelopmental disorders, e.g., CP and ADHD. Various factors have been identified that influence performance in manipulative tasks, such as strength, independent finger movements, finger speed, and the precise control of the fingertip forces employed to the object. We have investigated the development of the neural control of motor functions involved in object manipulation by means of behavioural and neuroimaging studies in typically developing children and children with neurodevelopmental disorders. A striato-frontal-parietal-cerebellar network has been identified for object manipulation, in which different areas seem to be designated to control specific motor functions. In recent studies, a complex skilled reaching task for rodents is used in combination with a genetic animal model of ADHD to understand the molecular basis of the impaired motor function.

Hans Forssberg was appointed professor in 1995. He is active at the Department of Woman and Child Health.

Hans Forssberg is vice president of Karolinska Institutet since January 2004. He is also Director of Stockholm Brain Institute.

Locations:

Seminar is simultaneously presented

HSC: CHP 147 – LIVE

Center for the Health Professional

HSC Campus Map/Directions:
<http://www.usc.edu/about/visit/hsc/>

UPC: HNB 100 — Video Conference

Hedco Neurosciences Building

UPC Campus Map/Directions:
<http://www.usc.edu/about/visit/upc/>

Organized by Professor Francisco Valero-Cuevas <http://bme.usc.edu/valero/>

Web Cast

<http://capture.usc.edu/college/Catalog/pages/catalog.aspx?catalogId=946350f1-ca84-40e7-b867-e16adba01e4e>

Information about all seminars can be found at
<http://bme.usc.edu/valero/ENH/ENH-Schedule.html>