



Seminar

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Developmental Pathways to Autism in Infants at Risk

Tuesday, 16 October, 11:15 a.m.

In the Thunberg Lecture Hall
SCAS, Linneanum, Thunbergsvägen 2, Uppsala
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S W E D I S H
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ABOUT TERJE FALCK-YTTER

Terje Falck-Ytter received his training in clinical psychology at Uppsala University (graduated in 2005) and then did his Ph.D. (awarded in 2010) in Developmental Psychology at the same university. Subsequently, he worked in parallel at Karolinska Institutet and Uppsala University, developing an independent line of research. Falck-Ytter's main research project aims to characterize and understand the development of infants who are later diagnosed with neurodevelopmental conditions, such as autism, adhd and language impairments. He is also leading longitudinal twin studies of children and young infants, aiming to establish the contribution of genetic and environmental factors to various developmentally informative measures early in life. Although Falck-Ytter's studies include many different brain and behavioral methods suited to young participants, his methodological specialty is gaze-tracking technology. Among other things, he has developed new ways of assessing the gaze patterns of children "live" when they interact with other people, which he believes is key to improving the ecological validity of research findings in this area.

Falck-Ytter is active in several European networks/projects that focus on autism and adhd from a developmental perspective. He has received the Oscar Prize (2016, Uppsala University); LifeWatch Award (2014, Niclas Öberg Foundation); and the Outstanding Young Researcher in Psychology Award (2012, Swedish National Committee for Psychological Sciences). Falck-Ytter has published his work in well-reputed scientific journals, such as *Nature Neuroscience*, *Nature Communications* and *Current Biology*.

As a Pro Futura Scientia Fellow, he will continue his studies of infants at risk for neurodevelopmental conditions and his studies of infant twins.

ABSTRACT

Autism is a heritable and common neurodevelopmental condition, with symptoms emerging over the first years of life. Longitudinal studies of infant siblings of children with autism can help us understand the developmental processes that precede the emergence of symptoms. Many key questions about the "developmental roots" of autism remain unanswered, such as: 1) Which developmental domains are affected first during infancy? 2) Is autism initially linked to reduced social motivation, or to atypicalities in social thinking? 3) Do early developmental data support the idea that autism is the extreme end of a continuum? In this presentation, I will first present some general conclusions from the "infants at risk" literature. Secondly, in the main part of the talk, I will narrow down on a few specific experiments from the Early Autism Sweden (EASE) study. I will use these to illustrate how we attempt to shed light on the above broad questions (and other mores specific ones) about the early development of autism.