

## Departmental Seminar

### Social Neuroscience of Human Attachment: From Single-Person Epigenetics to Interpersonal Neural Synchrony

**Prof. Pascal VRTICKA**  
**University of Essex, UK**

#### ABSTRACT

Attachment theory is built upon a long and rich history of scientific investigation that reaches back almost 100 years. The newest addition to this track of investigation is the detailed assessment of attachment's neurobiological and neurophysiological underpinnings as part of the Social Neuroscience of Human Attachment (SoNeAt). In my talk, I will first describe the origins of attachment theory and explain its two main traditions rooted in developmental and social psychology. In doing so, I will explain the many different ways of conceptualising and measuring attachment and point out both their commonalities and especially their differences that unfortunately cause a lot of confusion and misconception. I will then describe why it is important to understand attachment's neurobiological and neurophysiological underpinnings as they provide crucial objective information that goes beyond what we can see in behavioural observations, self-reports and interviews. Finally, I will introduce SoNeAt — consisting of six components including 1) traditional attachment methods (behavioural observations, self-reports and interviews), 2) physiology, 3) endocrinology, 4) genetics & epigenetics, 5) neuroimaging and 6) interpersonal neural synchrony — and illustrate how they all add to a much more fine-grained understanding of human attachment. What emerges from these insights is that all attachment styles represent meaningful and necessary adaptations to specific environmental demands and thus are not “good” or “bad” as such. When we talk about human attachment and use it in a clinical and therapeutic context, we should thus always emphasise its intrinsic usefulness and consider both factors of risk and resilience.

**ALL ARE WELCOME**

#### ABOUT THE SPEAKER

Dr Pascal Vrticka is currently a Senior Lecturer / Associate Professor at the Department of Psychology, University of Essex (Colchester, UK), where he leads the Social Neuroscience of Human Attachment (SoNeAt) Lab as Principal Investigator. He furthermore acts as Coordinating Board President of the Special Interest Research Group Social Neuroscience of Human Attachment (SIRG SoNeAt) situated within the Society for Emotion and Attachment Studies (SEAS) where he also is an Associate Member of the Executive Board (2020-2023). In addition, since 2022, Dr Pascal Vrticka acts as an Associate Trustee of the UK registered Charity Babygro.

Dr Pascal Vrticka studied biochemistry and neurobiology at the Swiss Federal Institute of Technology (ETH) in Zurich (Switzerland) to earn a Bachelor & Master in Science - Biology (1999-2005). He then moved to the Swiss Center for Affective Sciences hosted by the University of Geneva (Switzerland) where he obtained a PhD in (Social) Neuroscience under the Supervision of Prof Patrik Vuilleumier (2006-2009). After two years as a postdoctoral researcher at the Swiss Center for Affective Sciences in association with the Faculty of Psychology, University of Geneva (Switzerland) and Prof David Sander (2010-2011), Dr Pascal Vrticka moved to Stanford School of Medicine (California, USA). Thanks to a fellowship for advanced researchers from the Swiss National Research Foundation, he was able to secure a position as postdoctoral scholar with Prof Allan Reiss at the Department of Psychiatry and Behavioural Sciences (2012-2014). Moving back to Europe, Dr Pascal Vrticka further advanced his research programme at the Max Planck Institute for Human Cognitive and Brain Sciences in Leipzig (Germany), where he held several positions as a Research Scientist, Group Leader, and Senior Scientist. During this time, he actively collaborated with the University of Leipzig (Faculty of Life Sciences, University Clinic, and Leipzig Research Center for Early Child Development) in both teaching and student supervision, and obtained extensive funding by the Max Planck Society for several multidisciplinary research projects (2014-2020).

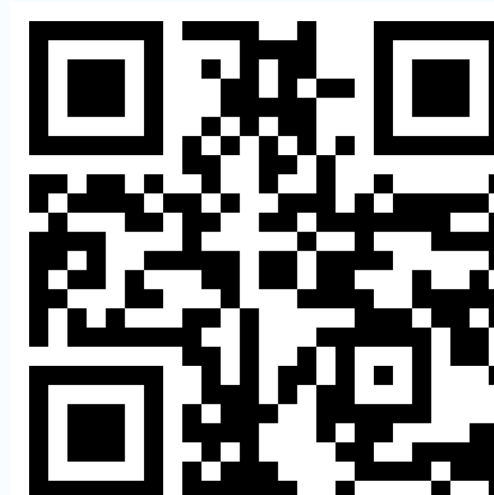


**Date:**  
**24 March 2025 (Mon)**

**Time:**  
**10:00 am - 11:30 am**

**Venue:**  
**Room G6, G/F,**  
**Ho Tim Building, CUHK**

**Language:**  
**English**



Enquiry:  
Tel: 3943 6213

Online Registration:  
<https://cloud.itsc.cuhk.edu.hk/webform/view.php?id=13705967>

Registration Deadline:  
21 March 2025