



The LEAD Graduate School & Research Network at the University of Tübingen invites you to attend the lecture by

Prof. Dr. Tobias Hauser

University of Tübingen, University College London (UCL)

What can computational neuroscience tell us about development and mental health?

Tuesday, 16nd May 2023 at 12.00 (MESZ)
Seminarraum, Europastraße 6. Tübingen

Abstract

Adolescence is a period when fundamental changes in social environment, brain functioning and cognitive functions take place. At the same time, many mental illnesses emerge during this critical period. However, little is known about how brain development drives changes in cognitive competencies, and how these in turn affect mental wellbeing. In my talk, I will take you on a whirlwind tour of my research, illustrating how we can use computational methods in longitudinal behavioural and neuroimaging studies, as well as large-scale smartphone-based studies to better understand adaptive and maladaptive adolescent development.

Biography



2004-2010 MSc in Psychology, University of Zurich
2010-2013 PhD, Dpt Child & Adolescence Psychiatry, Univ. Zurich
2014-2018: Postdoc w. Prof Ray Dolan, Wellcome Centre for Human Neuroimaging, UCL
2018-2022: Principal Investigator / Sir Henry Dale Fellow, Max Planck UCL Centre for Computational Psychiatry and Ageing Research, UCL
Since 2023: W3-Professor of Computational Psychiatry, Dept for General Psychiatry & Psychotherapy, Univ Tübingen

Important Publications

- Dubois M, Bowler A, Moses-Payne ME, Habicht J, Moran R, Steinbeis N & Hauser TU (2022). Exploration heuristics decrease during youth. *Cogn Affect Behav Neurosci*.
- Ziegler G*, Hauser TU*, Moutoussis M, Bullmore ET, Goodyer IM, Fonagy P, Jones PB, NSPN Consortium, Lindenberger U & Dolan RJ (2019). Compulsivity and impulsivity are linked to distinct developmental trajectories of fronto-striatal myelination. *Nature Neuroscience*. doi: 10.1101/328146
- Hauser TU, Will GJ, Dubois M & Dolan RJ (2019). Developmental Computational Psychiatry. *J Child Psychol Psychiatry* 60(4): 412-426.

Contact

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