



Centre de Neurosciences Psychiatriques

CNP SEMINARS

ANNOUNCEMENT

Potential and limitations of translational approaches in Child and Adolescent Psychiatric Research

Friday, September 18th, 2020, 11:00 – 12:00

Prof. Kerstin VON PLESSEN, MD & PhD

Cheffe de service
Service Universitaire de Psychiatrie de l'Enfant et de l'Adolescent

Translational Research in Child and Adolescent Psychiatry has a great potential in studying the dimensions of self-regulation in children with neuropsychiatric disorders and in typically developing children. We know that specific deficits, but also compensatory mechanisms contribute to elucidate the underlying biology and the development in children with neuropsychiatric disorders, such as in Tourette's syndrome (TS)¹, Attention-Deficit/Hyperactivity Disorder (ADHD)² and obsessive-compulsive disorder (OCD)³.

The next important step is to apply this knowledge when investigating effects of clinical interventions in the same populations. Innovative, non-pharmacological interventions for children with neuropsychiatric disorders have fortunately become available during the last years. However, the dissemination of such interventions in clinical practice is still limited. Probable reasons are first, lack of sufficient evidence, second, higher expenses than for medication, and third, the absence of a strong lobby for non-pharmacological interventions. Such interventions often target the development of self-regulation, yet the specific neurobiological mechanisms for their effects have not sufficiently been studied in representative samples. Knowledge concerning these mechanisms will be a crucial contribution to individualised and high-quality medical treatment of children and adolescents⁴.

Another important aspect is the mapping of the underlying vulnerability (genetic and neurobiology) of children at risk for psychiatric disorders in a trans-diagnostic perspective⁵. Here, a longitudinal perspective, as well as the understanding of genetic and environmental factors⁶ is particularly relevant for the study of risk factors and resilience. Knowing more about the biological risk factors opens doors for preventive approaches, but poses in the mean time important ethical questions.

Invited by C.-B. Eap
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**Auditoire Christian Muller - Bâtiment 17A - Rez - Salle 020
Hôpital Psychiatrique de Cery-Site de Cery, CH-1008 Prilly-Lausanne**

Related publications

1. Eichele H, Eichele T, Marquardt L, Adolfsdottir S, Hugdahl K, Sørensen L, Plessen KJ. Development of Performance and ERPs in a Flanker Task in Children and Adolescents with Tourette Syndrome-A Follow-Up Study. *Front Neurosci.* 2017 Jun 12;11:305.
2. Plessen KJ, Allen EA, Eichele H, Wageningen Hv, Høvik MF, Sørensen L, Worren MK, Hugdahl K, Eichele T. (2016) Reduced Error Signaling in Medication-Naïve Children with ADHD: Relationships to Behavioral Variability and Post-Error Adaptations. *J Psychiatry Neurosci.* 41(2):77-87.
3. Boedhoe PSW et al. ENIGMA ADHD working group; ENIGMA ASD working group; ENIGMA OCD working group, Thompson PM, Stein DJ, Buitelaar J, Franke B, van den Heuvel OA. Subcortical Brain Volume, Regional Cortical Thickness, and Cortical Surface Area Across Disorders: Findings From the ENIGMA ADHD, ASD, and OCD Working Groups. *Am J Psychiatry.* 2020 Sep 1;177(9):834-843.
4. Uhre CF, Uhre VF, Lønfeldt NN, Pretzmann L, Vangkilde S, Plessen KJ, Glud C, Jakobsen JC, Pagsberg AK. Systematic Review and Meta-Analysis: Cognitive-Behavioral Therapy for Obsessive-Compulsive Disorder in Children and Adolescents. *J Am Acad Child Adolesc Psychiatry.* 2020 Jan;59(1):64-77.
5. Burton BK, Vangkilde S, Petersen A, Skovgaard LT, Jepsen JR, Hemager N, Christiani CJ, Spang KS, Ellersgaard D, Greve A, Gantriis D, Eichele H, Mors O, Nordentoft M, Thorup AAE, Plessen KJ (2018) Sustained Attention and Interference Control Among 7-Year-Old Children With a Familial High Risk of Schizophrenia or Bipolar Disorder-A Nationwide Observational Cohort Study. *Biol Psychiatry Cogn Neurosci Neuroimaging.* 2018 Aug;3(8):704-712.
6. Klauser P, Revet A, Anagnostopoulos D, Hebebrand J, Moreno C, Raynaud JP, Armando M. Clinical high risk for psychosis paradigm for CAP: do not throw the baby out with the bathwater. *European Child & Adolescent Psychiatry*
<https://doi.org/10.1007/s00787-020-01624-2>