



Prof. Jan Buitelaar (Radboud University, Nijmegen, NL) who coordinates the Candy Project <https://www.candy-project.eu/> and leads ethics, training and the overall project management from RADBOUDUMC, Donders Institute for Brain, Cognition and Behaviour, Radboudumc, Stichting Katholieke will be presenting **The Biological links between ADHD and co-existing somatic illnesses and how treatment and monitoring can be improved and improving monitoring.**

To view the full programme of our mini-congress visit

<https://adhdeurope.eu/events-webinars/>

News from the Candy Research Project. At 14h35 CET, Paris

<https://www.timeanddate.com/worldclock/meeting.html> . No registration required

ADHD Europe on behalf of our members <https://adhdeurope.eu/about/members/> would like to congratulate Prof Jan Buitelaar – who has received the royal distinction ‘Knight of the Order of the Netherlands lion’ for his exceptional academic and/or social achievements <https://www.ru.nl/english/news-agenda/news/vm/2021/april/royal-distinctions-eight-radboudians/>

Prof. Jan Buitelaar RUMC / Radboud University and the Donders Institute for Brain, Cognition and Behaviour are a leading Dutch institute for medical research, with several groups specialized in top-level clinical care and research in ASD, ADHD, ID and related neuropsychiatric disorders. Over 600 researchers work at the Donders Institute on unravelling the mechanisms underlying normal and altered brain function. Their research includes cognition and behaviour in humans as well as on the neuronal substrate, including the genetic, molecular and cellular processes that underlie cognition and behaviour, covering the full spectrum of research ‘from Molecule to Man’.

What is the Candy Project all about?

Neurodevelopmental conditions, such as autism, attention-deficit hyperactivity disorder (ADHD), and intellectual disability (ID) are clinically heterogeneous, often co-exist and they affect ~15% of the European population. They are also often associated with somatic illnesses (e.g. epilepsy, autoimmune and gastrointestinal disease) which can have a strong impact on the quality of life. The combination of ID and epilepsy in autism, for instance, is associated with a reduction in lifespan of ~ 20 years. Currently, we lack effective new treatments for neurodevelopmental conditions and do not understand why they co-exist.

There is hope, however. Recent evidence shows that certain genetic variants, which increase the risk for neurodevelopmental conditions, are shared between these conditions and affect the same biological pathways. Many of these variants impact synaptic plasticity (activity-dependent modification of synaptic transmission) and glutamate and GABA neurotransmission (i.e. excitatory and inhibitory (E/I) balance). The symptom profile and severity are likely also moderated by environmental factors acting at different time points (critical periods). Therefore, we are also investigating the role of early maternal immune activation and the gut microbiome. The interaction between host genetics and gut microbiome could clarify why carrying certain risk-conferring genetic variants only explains a part of the different symptom spectra that is seen neurodevelopmental conditions. Our overall goal is to improve the understanding of the crosstalk between genetics, immune activation/inflammation, and microbiome, and thereby provide a compelling novel conceptual framework to:

1. ELUCIDATE THE CAUSAL MECHANISMS THAT UNDERLIE **AUTISM, ADHD, ID AND EPILEPSY**
2. DEVELOP NEW STRATEGIES FOR PREVENTION AND TREATMENT OF **AUTISM, ADHD, ID, AND EPILEPSY**
3. DELIVER NOVEL BIOMARKERS TO GUIDE EARLY DIAGNOSIS, STRATIFICATION AND TREATMENT MONITORING
4. OPEN-UP NEW AVENUES FOR RESEARCH IN **AUTISM, ADHD, ID, AND EPILEPSY**

This will ultimately benefit people with neurodevelopmental conditions, improving their long-term outcome and lowering their burden.

Many thanks to the Candy Project for sharing their news with us!

If you can afford to, please consider making a donation to ADHD Europe— every euro makes a difference! Donations will be used to raise awareness of the work that still needs to be done for ADHD in Europe and globally. Donations are via this [paypal link](#)

More information about ADHD Europe, visit our www.adhdeurope.eu .

To catch up on our previous live events, visit <https://www.youtube.com/c/broadcastingadhdeurope>

Not to be missed! Share this announcement to your friends, family, colleagues!

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