

## Propositions

# NEUROBIOLOGICAL PATHWAYS TO CHILDHOOD PSYCHOPATHOLOGY

Population-based studies of cognition and behavior

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1. Maternal hypothyroxinemia in early gestation is associated with significant increase in the risk of autistic symptoms in the offspring by 6 years of age (This manuscript).
2. Elevated titers of Thyroid Peroxidase Antibodies in pregnancy impact children's risk of problem behavior, in particular, attention deficit/hyperactivity. The observed effect is only partially explained by maternal thyroid status (This manuscript).
3. Variations in brain structures detectible in infancy predict subtle impairments in child's executive functioning, i.e. inhibition, but not symptoms of ADHD (This manuscript).
4. Children with low positive emotionality have a higher risk of having withdrawn problems, which cannot be explained by preexisting internalizing problems (This manuscript).
5. Many symptoms associated with autism spectrum disorders resolve during the preschool period (This manuscript).
6. Subclinical disorders are psychiatrists' first acknowledgment that psychopathology is inherently continuous.
7. We never learn about the cause of a disease unless we know the characteristics of individuals free of the disease.
8. Studying genetic and environmental bases of psychopathology is not possible if the complex phenotype of the disorder is not fully understood.
9. Our challenge is to uncover the key ingredients in child development and the ways those ingredients are combined and cooked to produce a culinary masterpiece, a kitchen disaster, and everything in between (Rettew DC, *JAACAP* 2010).
10. "Brainy" children are not clever solely by having more grey matter. Rather, intelligence is related to dynamic of cortical maturation (Shaw P, *Nature* 2006).
11. In order to be irreplaceable, one must always be different (Coco Chanel).