



UNIVERSITEIT VAN AMSTERDAM

Program group: Preventive Youth Care

When Mummy and Daddy Get Under Your Skin: A New Look at How Parenting Affects Children's Stress Reactivity and Disruptive Behavior

Prof. Geertjan Overbeek



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One out of three to six children reports to have suffered physical or sexual abuse before 18th, or reports to have experienced dysfunctional parenting (insensitivity, harshness).

In The Netherlands, one out of ten children are physically or emotionally neglected, and one to two out of 25 children are abused.



1 to 2 children per class...

... societal costs linked to persistent psychopathology can amount up to € 280.000,-

... effective interventions have a potentially huge *return on investment*

... not only a potential for reducing societal costs; also huge potential gains in safety, in academic achievements, health and well-being









JEOPARDY

research line 1

3-year, 6-wave longitudinal study ($n = 382$)
risk population of parents; screening parenting stress in Sarphati cohort (consultation bureaus and OKTs); children 12-14 mnths

research line 2

RCTs of parenting interventions ($n = 224$)
VIPP-SD and Family Check-Up in *stepped care* design; follow-up of at-risk families; children 2-4 yrs



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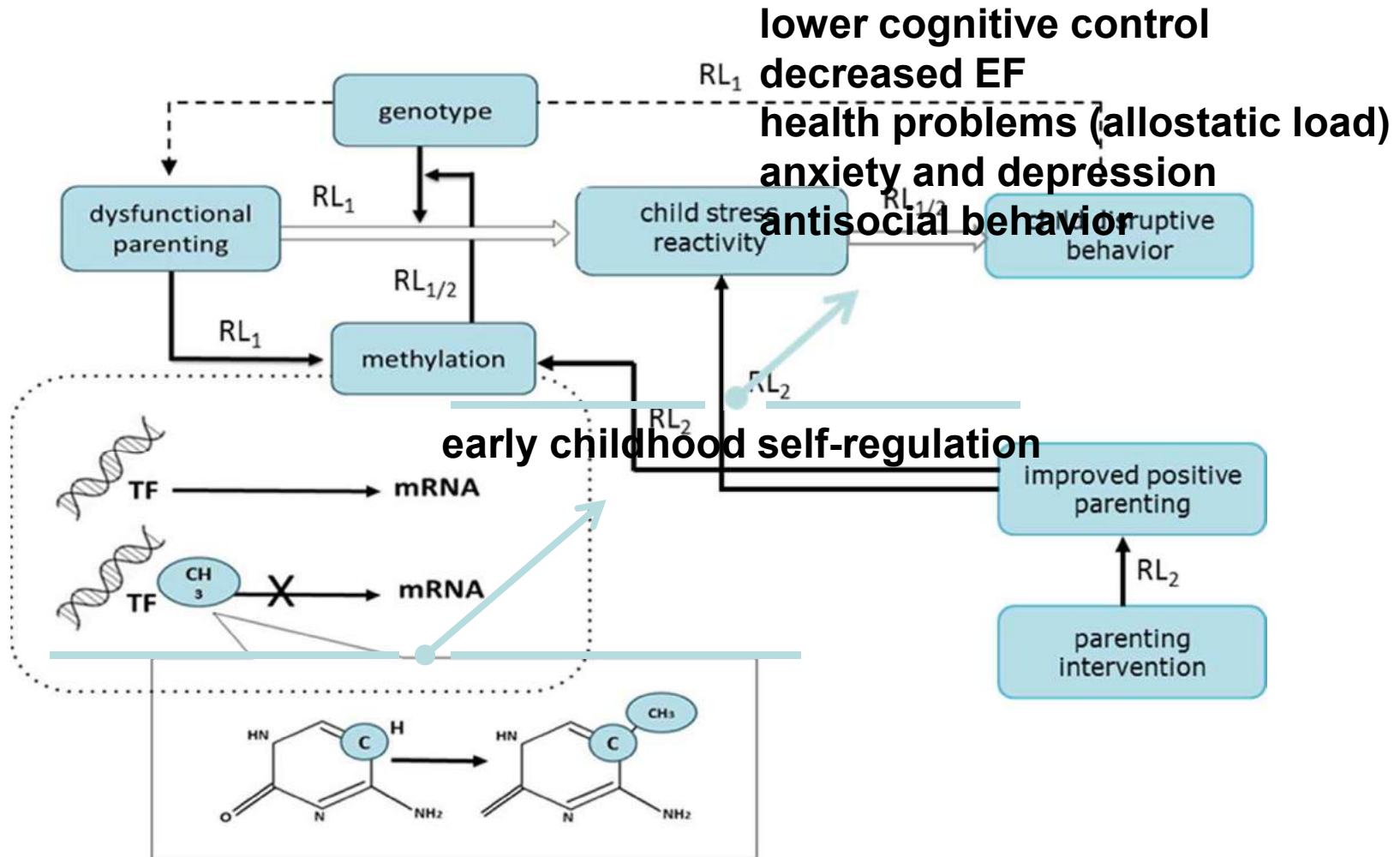


- does parenting actually get under the skin of children?
- *flipping the methylation switch*

- JEOPARDY: pioneering research
 - poly-(epi)genetic data, link with stress-reactivity
 - experimental design: exclude alternative explanations

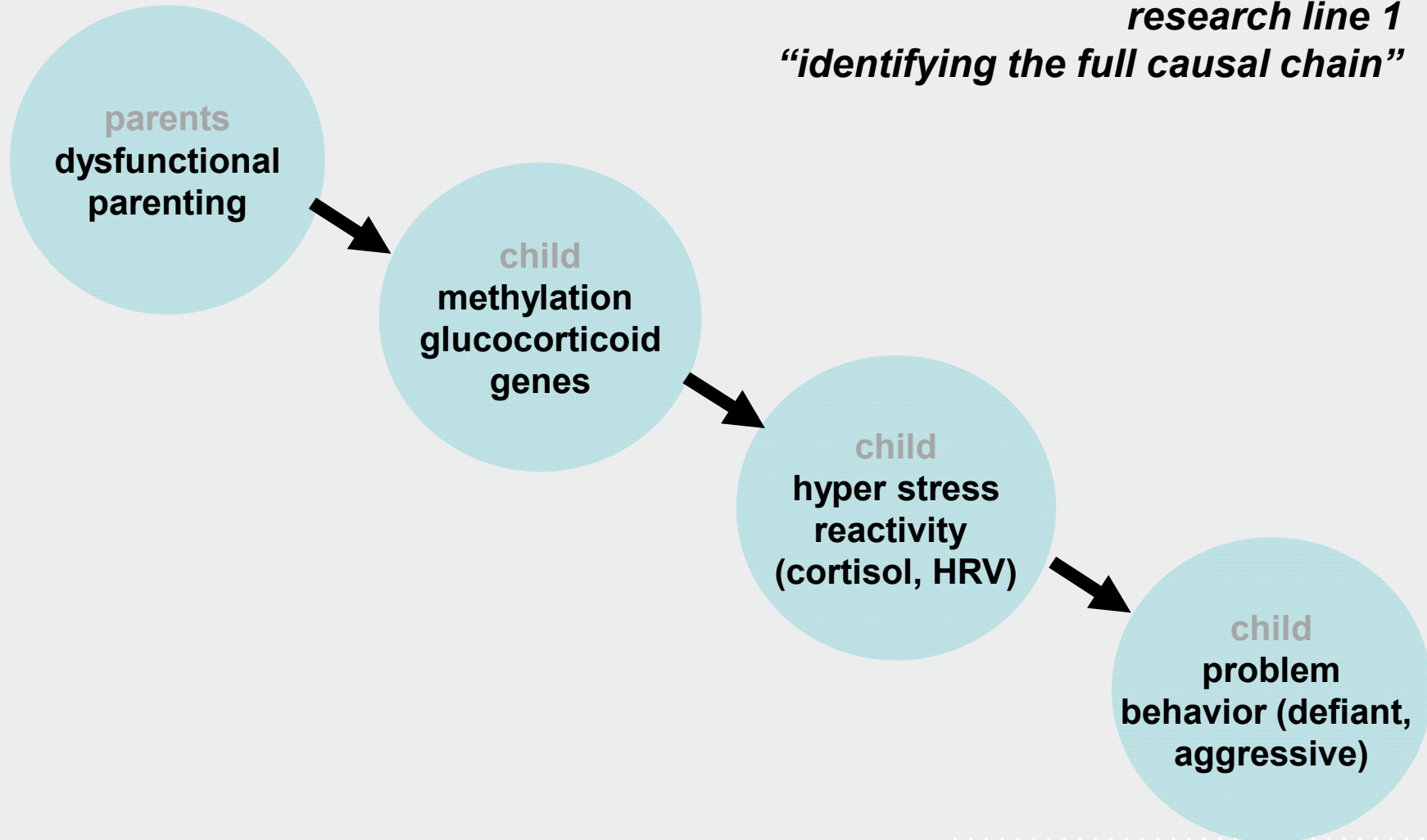
- screening NOSI (parenting stress) → $n > 20,000$

- multi-informant, multi-method (questionnaires | interaction observations | self-regulation (frustration) and stress-reactivity (LAB-TAB) tasks | HRV and hair-salivary (diurnal+stress) cortisol | multiple methylation assessments



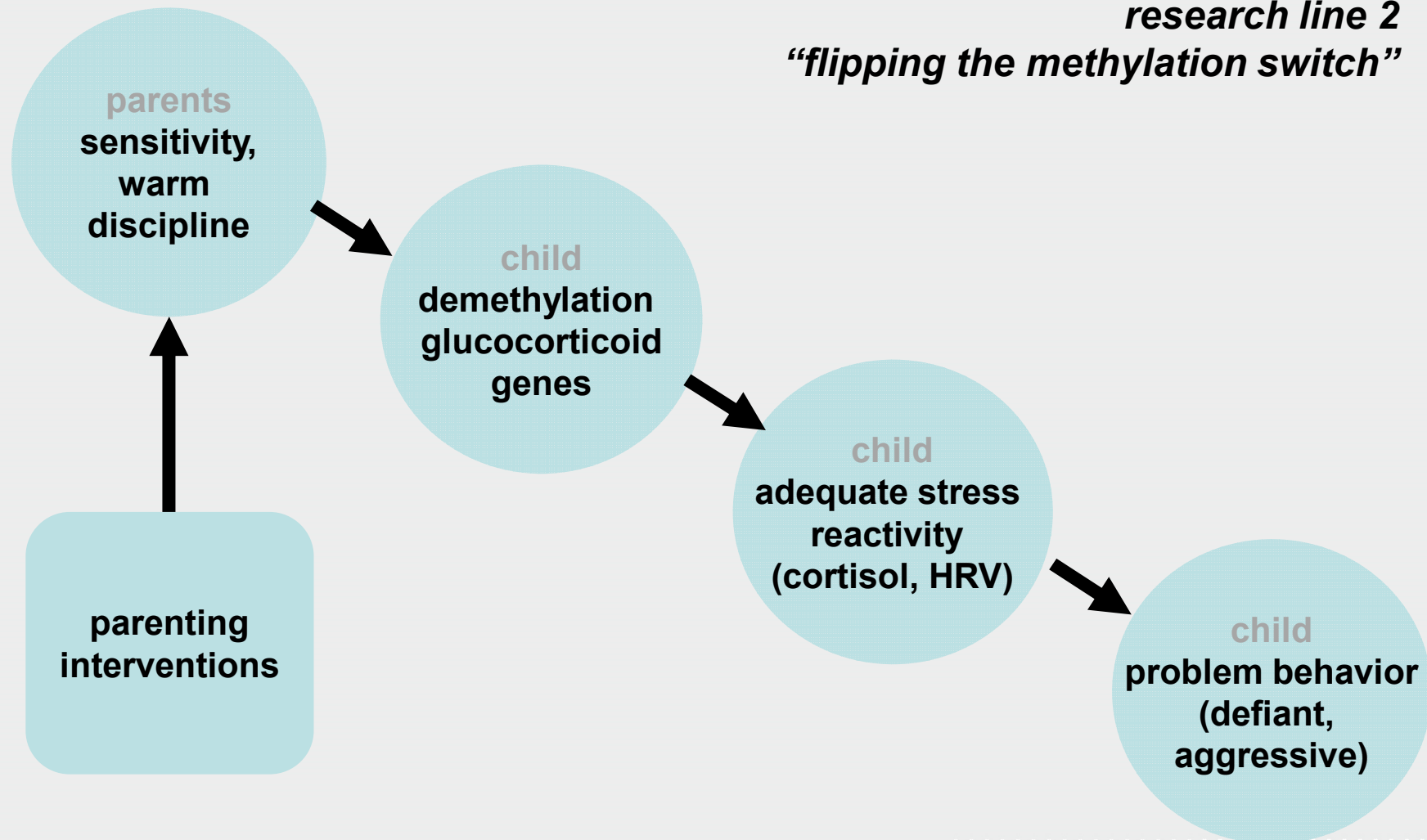


research line 1
“identifying the full causal chain”





research line 2
“flipping the methylation switch”





A farfetched idea?...

- in rodents: low pup licking-grooming and arched-back nursing lead to methylation at GR gene, but this effect was successfully chemically reversed (Francis et al., 2004; Weaver et al., 2002).
- in humans: evidence for parenting intervention-induced changes in cortisol reactivity and inflammation, both related to glucocorticoid functioning (Dozier et al., 2008; Miller et al., 2014).
- Bucharest Early Intervention Project: more time spent in institutional care associated with lower DNA methylation in CpG sites in FKBP5 and SLC6A4 genes (Non et al., 2016).



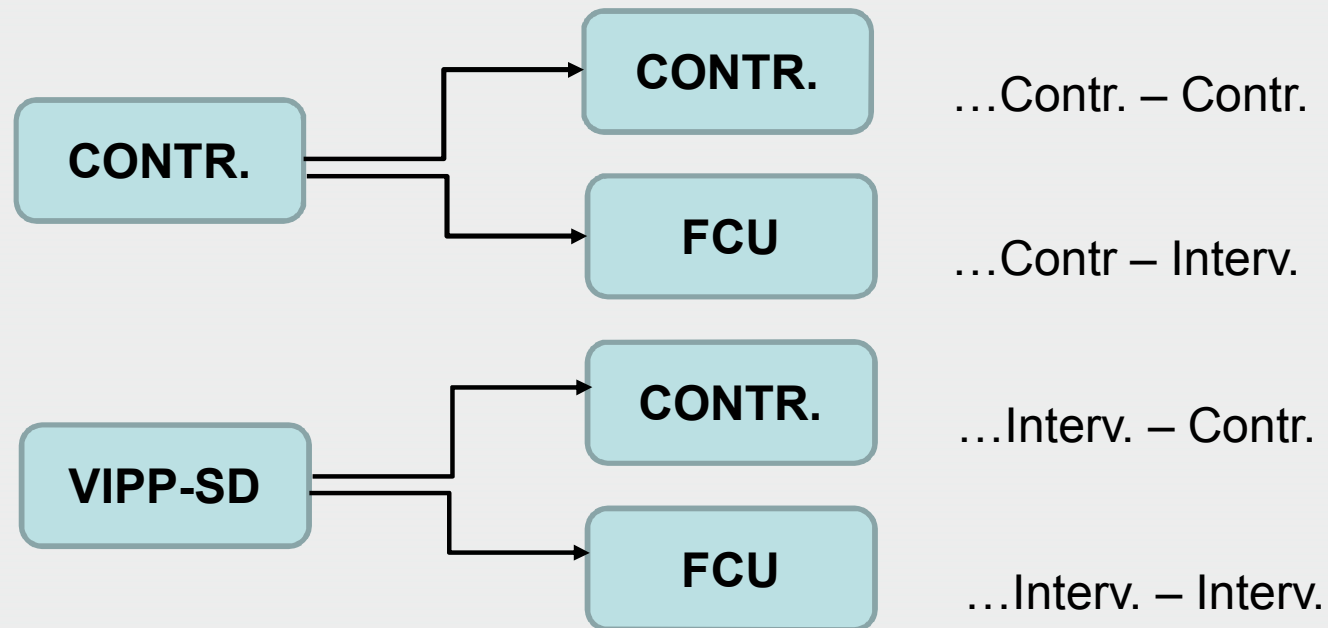
VIPP-SD

12-14 mnths



FCU

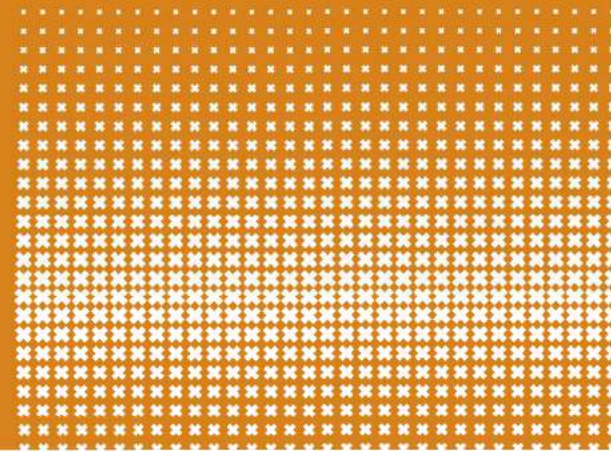
30-32 mnths





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Ouder- en Kindteams
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Response Ouder- en Kindteam Amsterdam

Cecile Winkelman, projectleader prevention

- Context factors
- Discussing child abuse
- Support structure
- Parenting program
- Further research

