

Before we hear about the most recent scientific evidence from our invited speakers.

It is important to follow one of Aristotle's rules for learning:

He who considers things in their first growth and origin, ... will obtain the clearest view of them.

Politics, Book 1 chap 2

SO, WHEN DID WE START UNDERSTANDING THE IMPORTANCE OF EARLY CHILDHOOD EDUCATION?

To answer this question I will use four Experts who could not be with us In Paris

ARISTOTLE

After the children are born, the manner of rearing them is supposed to have a great effect...

Politics, Book VII chap 17

the difference between one and another training in habits in our childhood is not a light matter, but important, or rather, all-important.

Nicomachean Ethics, chap1.

SENECA

L'éducation exige un très grand soin, qui
portera ses fruits plus tard;
car il est facile de pétrir des âmes
encore tendres,
mais on extirpe difficilement des vices
qui ont grandi avec nous.

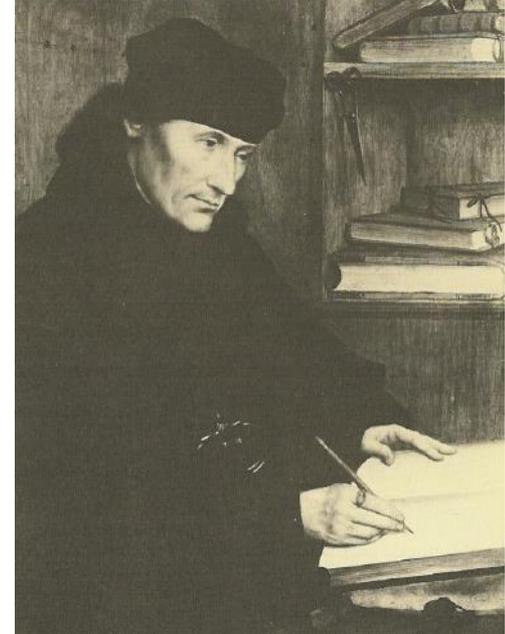
Erasmus of Rotterdam, On education, 1529

I must offer you one piece of advice . . .

Do not follow common fashion and opinion by allowing your son's first years to pass by without the benefits of instruction and by deferring his first steps in learning to an age when his mind will already be less receptive and more subject to grave temptations. . .

you ought not to pay attention to those ...who maintain out of a false spirit of tenderness and compassion that children should be left alone until early adolescence, to be pampered in the mean time by their dear mothers and spoiled by nurses...

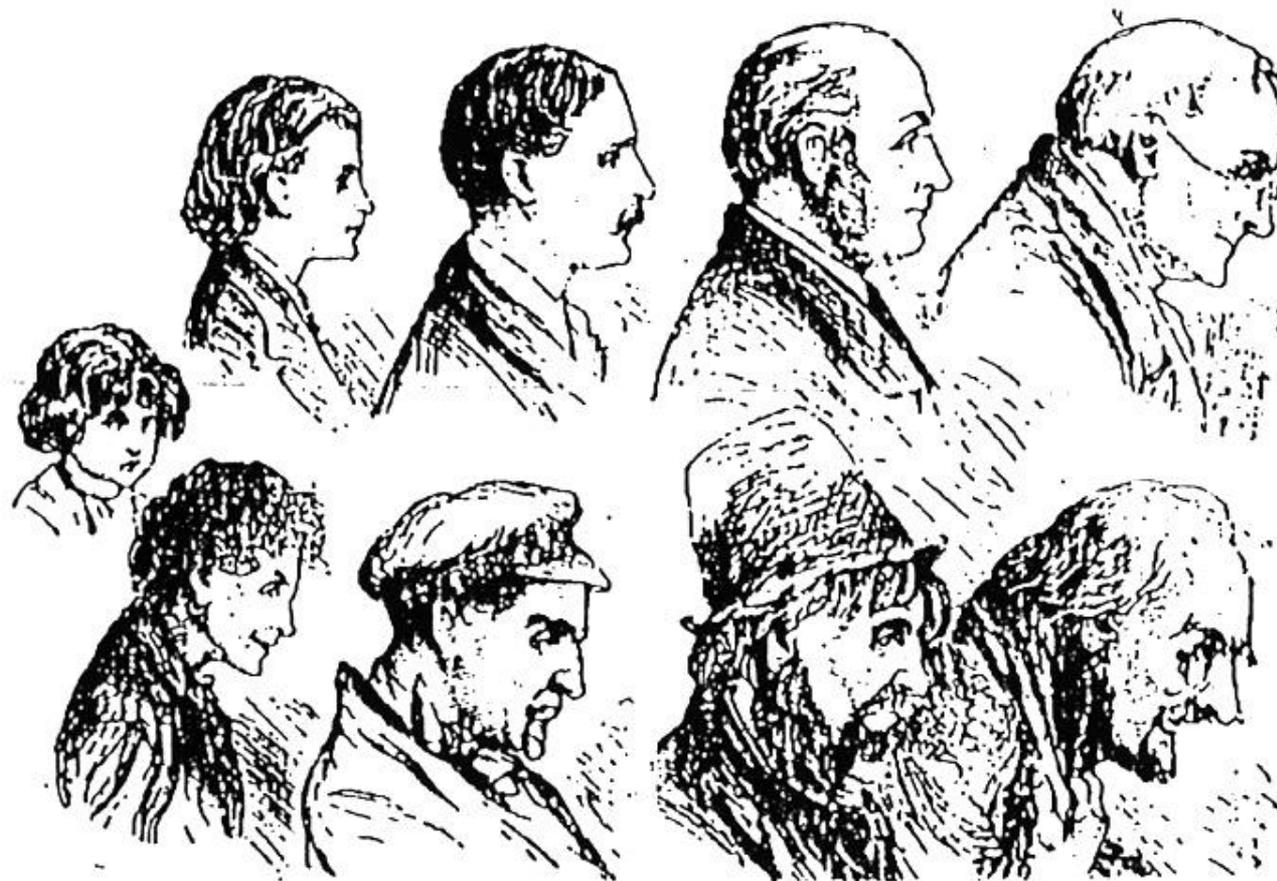
We should be especially careful with our children during their first years. For at this stage their behaviour is guided by instinct more than by reason, so that they are inclined equally to good and evil –more to the latter perhaps – and it is always easier to forget good habits than to unlearn bad ones.



The most brilliant and least reasoned hopes had preceded the Savage of Aveyron to Paris... many people, otherwise commendable for their enlightenment, forgetting that our organs are much less flexible and imitation is much more difficult when one is distant from society and from early childhood, believed that the education of this individual would require a few months... »

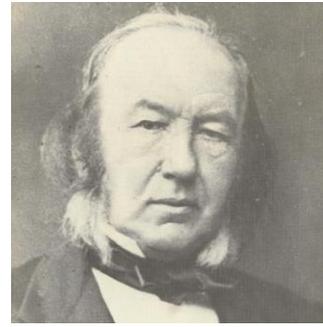
Jean Itard (1801, pp. 130-131)

Figure 1. Le jeune enfant est à la croisée des chemins



1. L'enfant: Que deviendra-t-il?
2. L'école/La rue
3. Des études avancées/Alcoolisme
4. Une carrière réussie/Vices et misères
5. Une retraite honorable/Dégoût et mendicité

So, were Philosophers and Educators of the past 2500 years right concerning the importance of early childhood education?



Claude Bernard

**instead of considering social events as
scientific problems,
we continue to rely on our lucky star.**

**au lieu d'envisager les phénomènes sociaux comme des
problèmes scientifiques, on marche à l'aventure en se
confiant à son étoile.**

10 mars, 1871

130 years later

Financial Times, 27 August 2001

World wide and over many years governments have spent billions on social programmes from education and crime to health and welfare-to-work...

Governments have endlessly rolled out new policy, ignorant of its likely effects... They have rarely seemed keen to discover whether the policy works for fear of the political embarrassment that accompanies failure.

Slowly, that is changing. In an increasingly post-ideological world governments everywhere are interested in "what works".

The aim is to establish which approaches help and which may do harm. Fact, as opposed to fashion, may be about to invade social policy.

Early Child Development Research 1946-2016

1946 First large scale longitudinal study initiated at birth (UK)

1952 First coordinated set of longitudinal studies initiated at birth (Europe)

1962 First ECE experimental study with children from poor families (US)

1972 First large scale ECE experimental study in developing countries (Mauritius)

1980 First ECE experiment starting with support to deprived pregnant women (US)

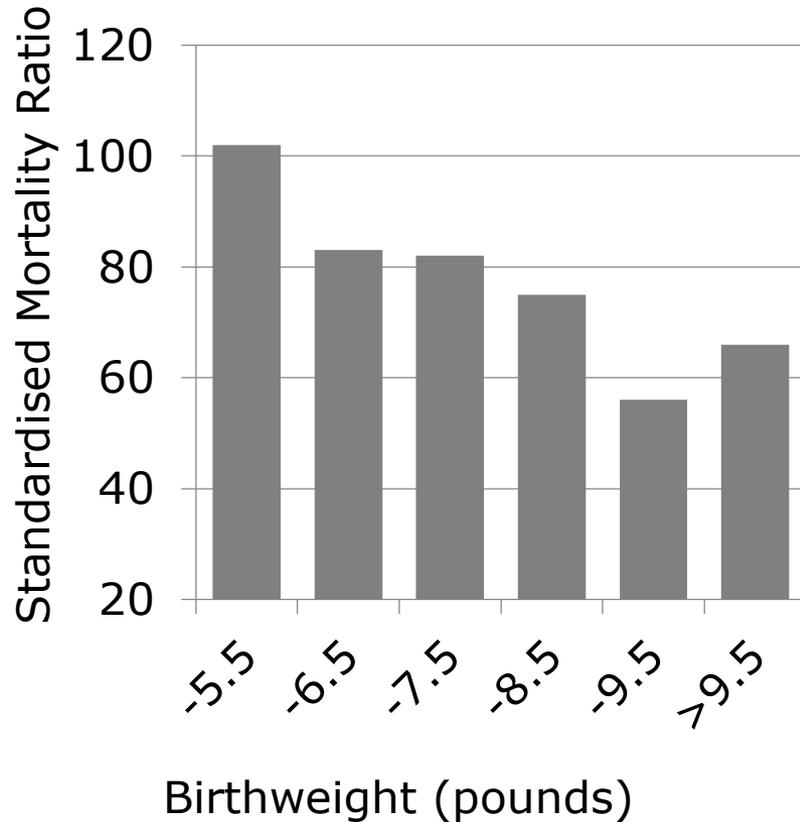
70 years of research to understand the development of humans who live more than 70 years means that ECE Research is a relatively young science.

But, we are starting to know much better than Aristotle and Erasmus what are the developmental mechanisms and which interventions are needed to achieve our aims.

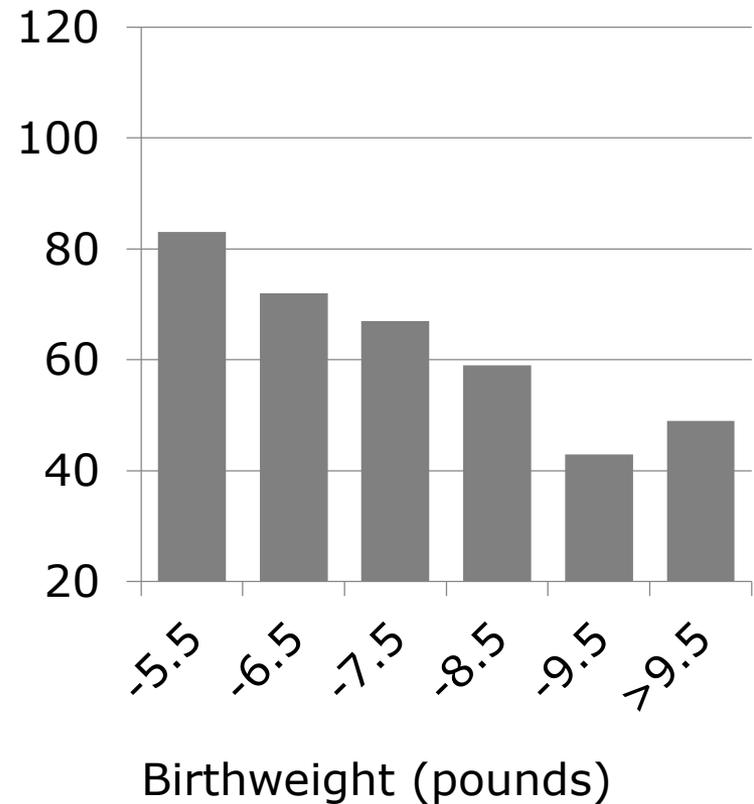
Birth Weight and Mortality from Coronary Heart disease

(Barker et al. 1989)

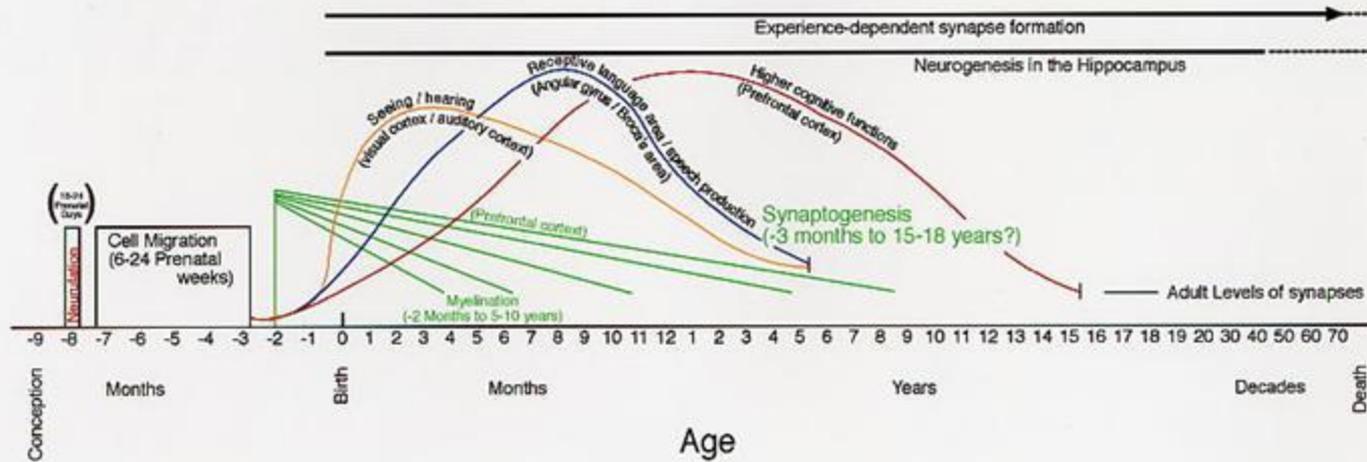
Men



Women



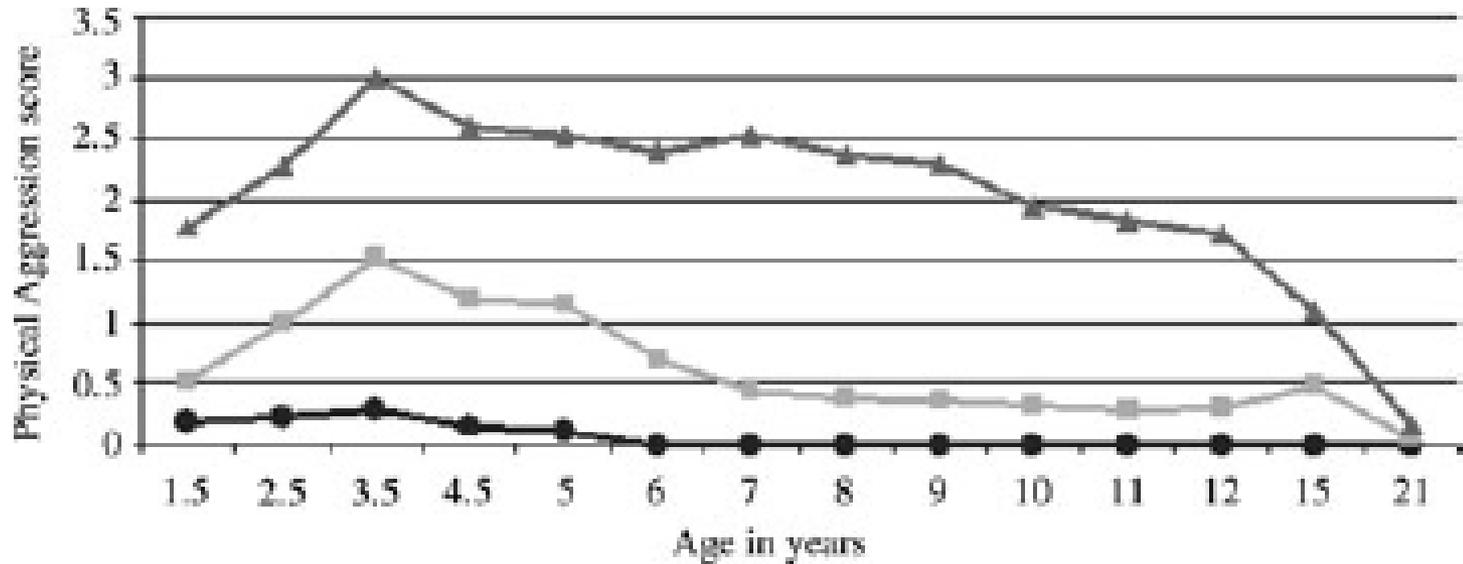
Human Brain Development



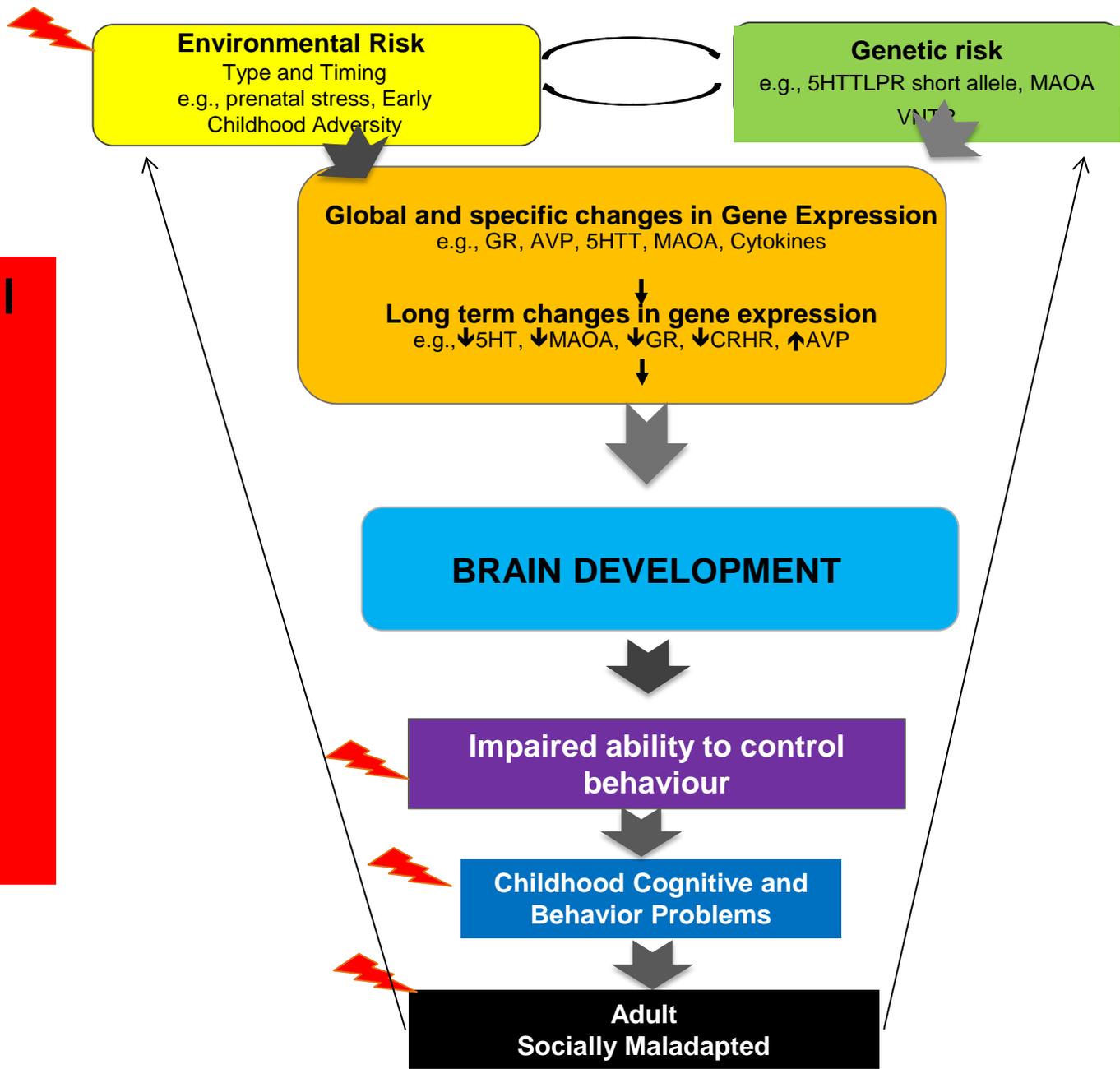
Charles Nelson, 2001

Physical Aggression Trajectories

From 17 months to 21 years



Tremblay & Côté, 2009



Environmental Adversity, Genes, Brain and Child Development

Adapted from Provençal et al., 2015

 Interventions

THE MOST CONVINCING EVIDENCE FROM RECENT RESEARCH

Michel Boivin: Université Laval, Québec, Canada

Yann Algan: SciencePo, Paris, France

Monika Queisser: OCDE, Paris, France

Jan van Ravens: Yale University, United States