Cerebellum is more than a motor control center

- Cerebellum may have fundamental cognitive and emotional functions (Klein et al 2016)

- Cerebellar cognitive affective syndrome: first proposed by Schmahmann (2004)

  Includes disturbances of executive function and impaired spatial cognition

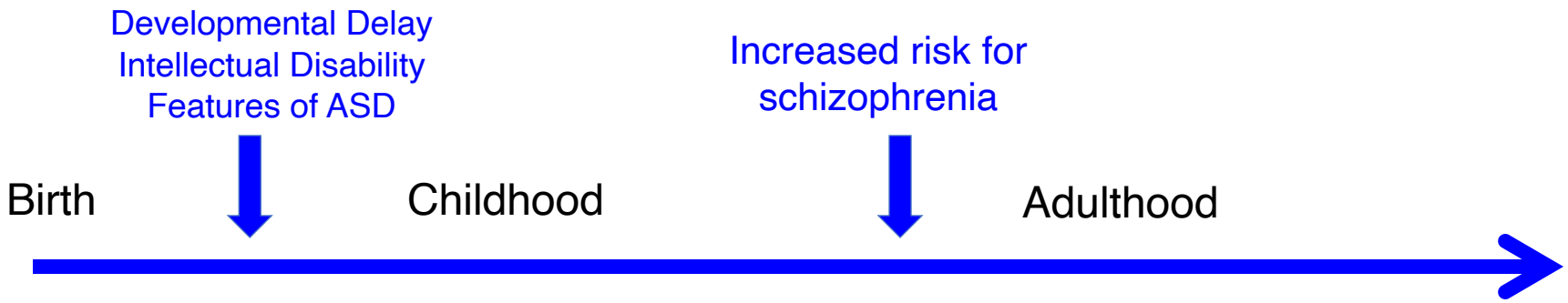
Is cerebellar dysfunction in the causal pathway for 3q29 deletion syndrome phenotypes? Area for future study
Your participation has given us an important clue!

Conclusions

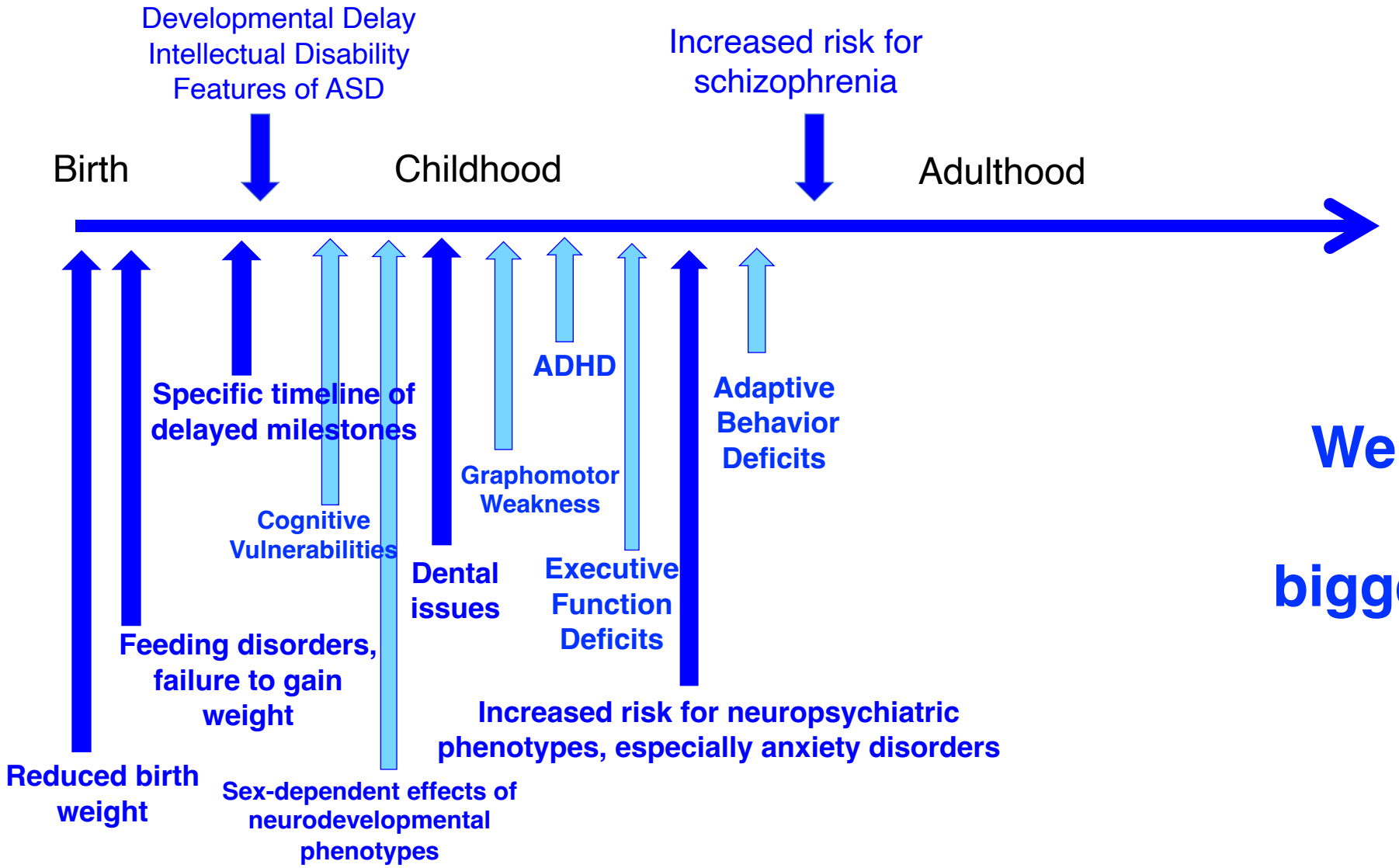
- ADHD, graphomotor weakness, and executive function deficits are present in 3q29 deletion syndrome
- There is a unique profile of cognitive vulnerability
- High burden of ASD in females
- Hypothesis: Cerebellum is a site of dysregulation

- **Direct evaluation of study subjects reveals nuances of behavior, inspires data-driven hypotheses for mechanistic investigation**

3q29 deletion syndrome: 2010



3q29 deletion syndrome: 2020



We're going to need a bigger graphic….