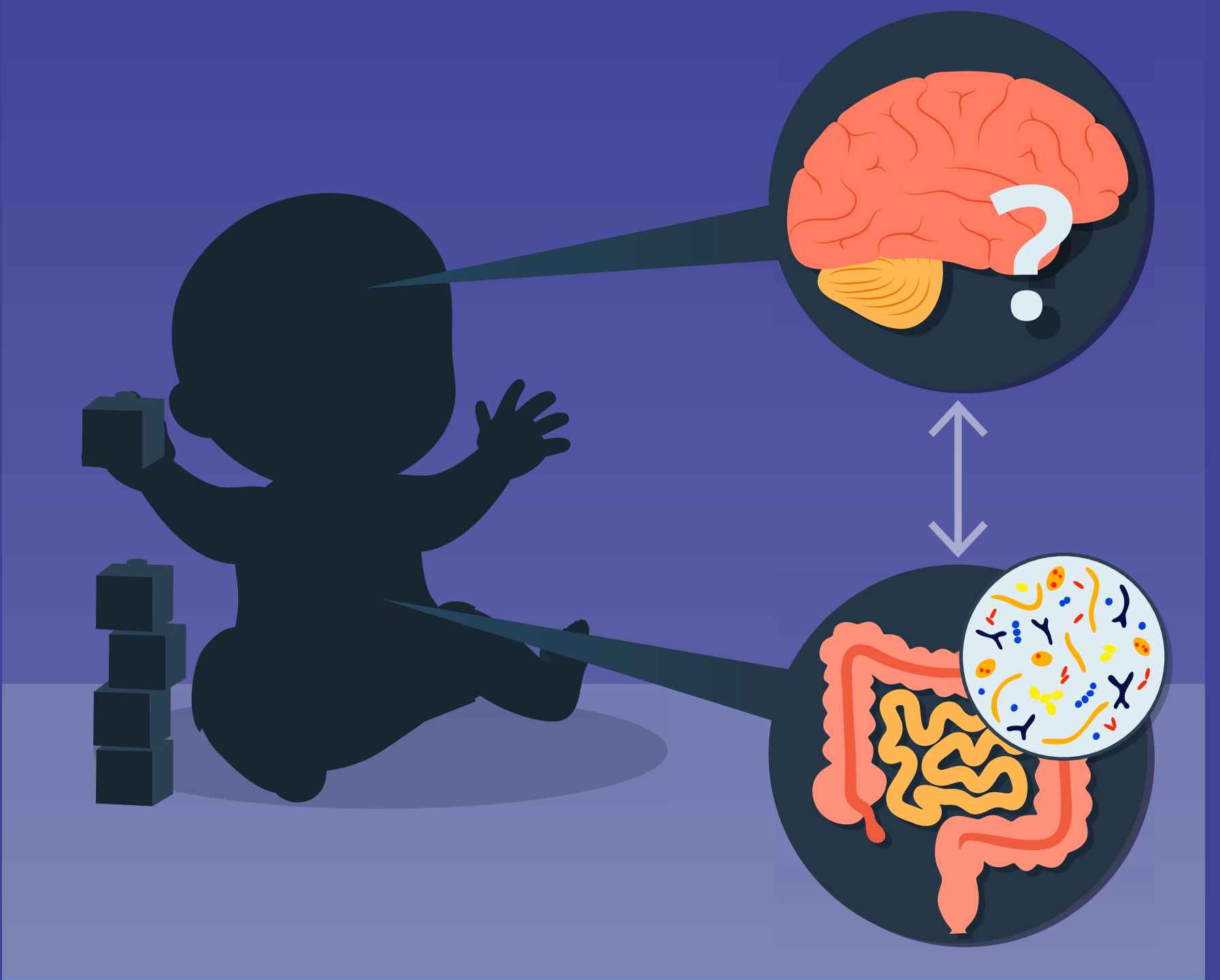


# Temporal Association Between Gut Microbiota and Neurodevelopment in Healthy Infants

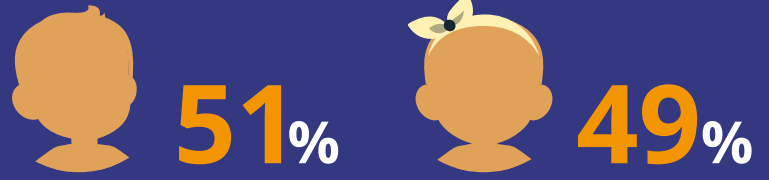
Studies suggest a potential influence of the gut microbiome on neurological development



However, the temporal association between gut microbiota and early neurodevelopment in healthy infants remains unknown

### Neurodevelopment and microbiome assessment of 405 infants

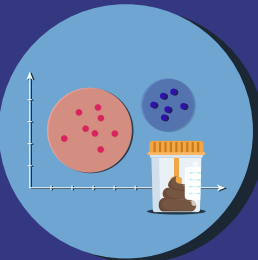
Part of **CHILD** (Canadian Healthy Infant Longitudinal Development) cohort study



**51%** **49%**


2-4 months | 1 year | 2 years

Visit schedule



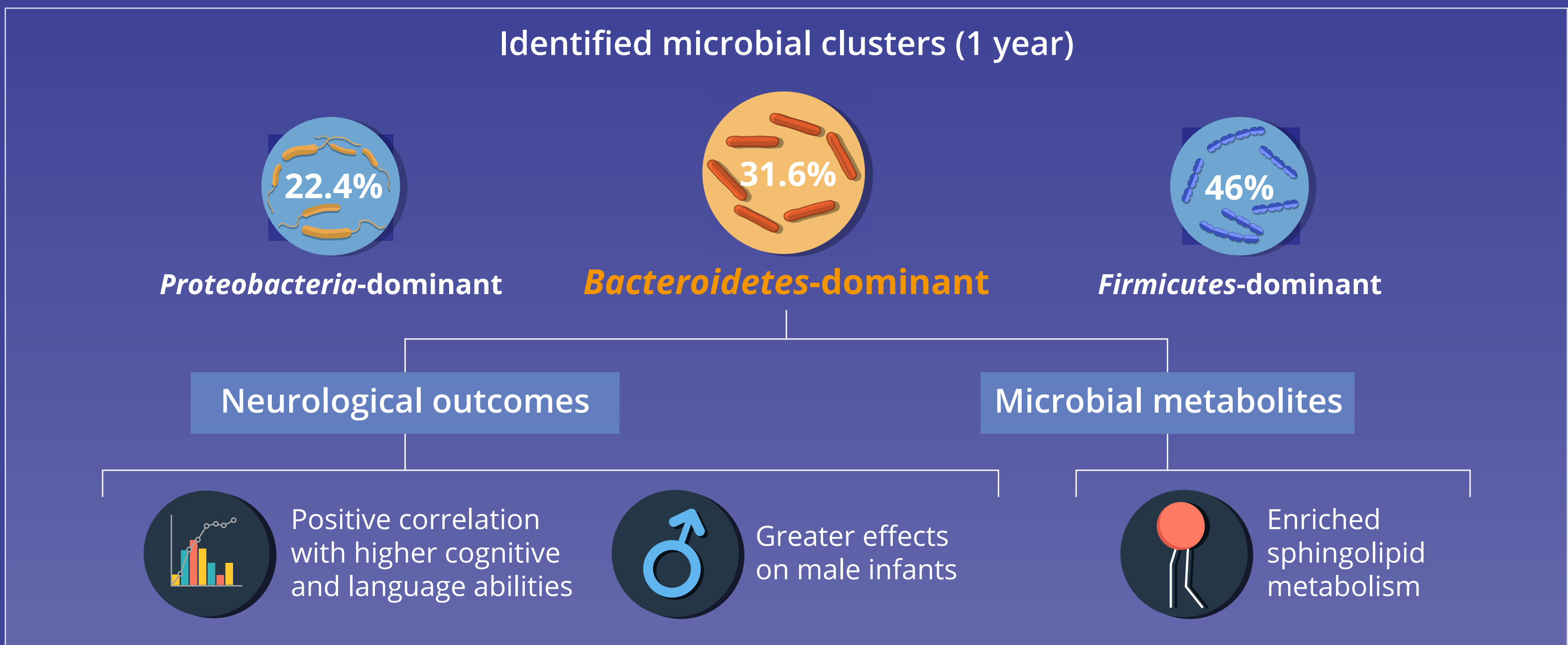
16s rRNA profiling (at 1 year)

Fecal microbiota cluster analyses



Cognitive, language, and motor development (at 2 years)

Brain function assessment



**The genus *Bacteroides* in the gut microbiome is positively associated with improved neurodevelopment during late infancy in a sex-specific manner**

