

Microcephaly

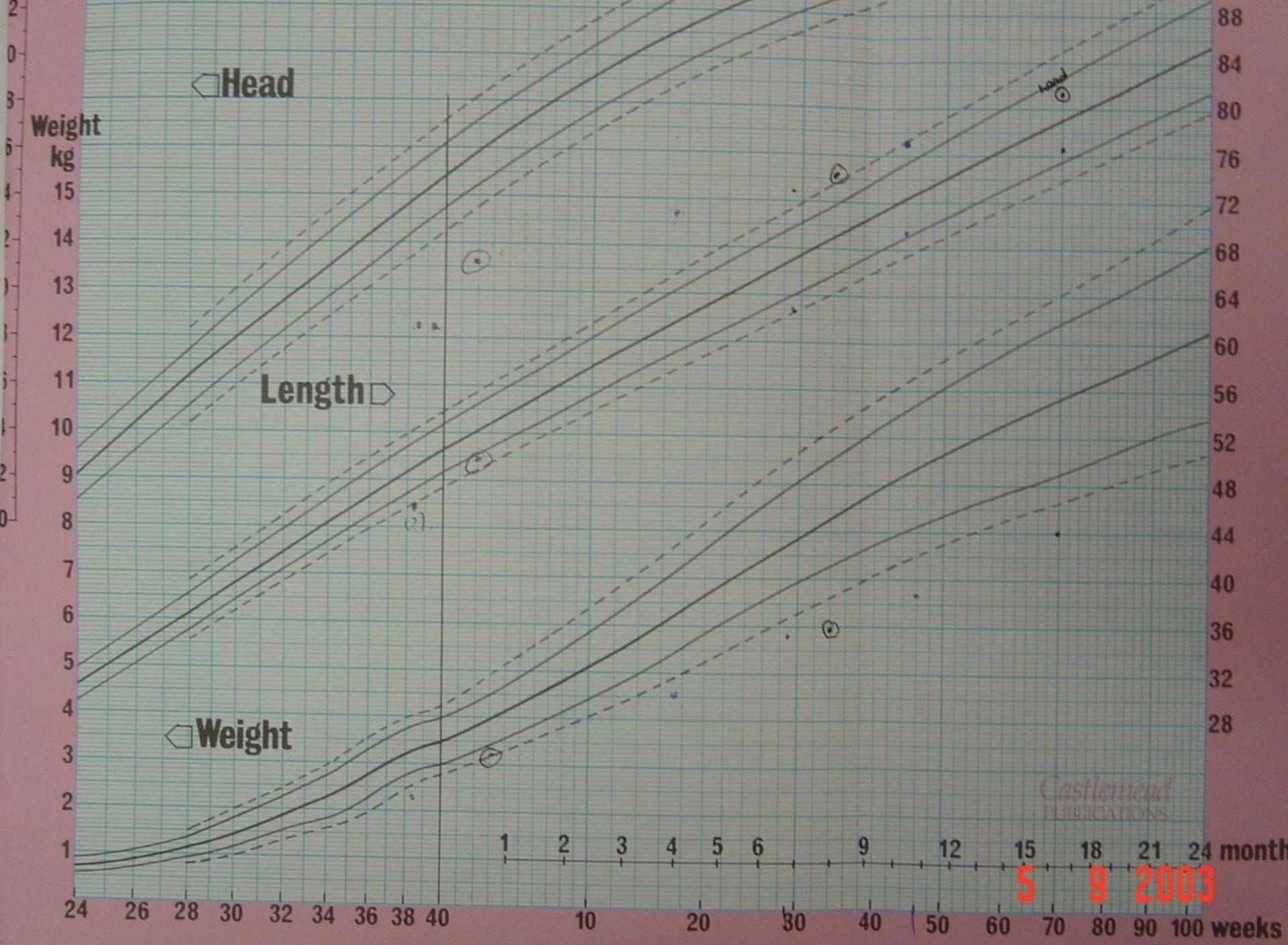


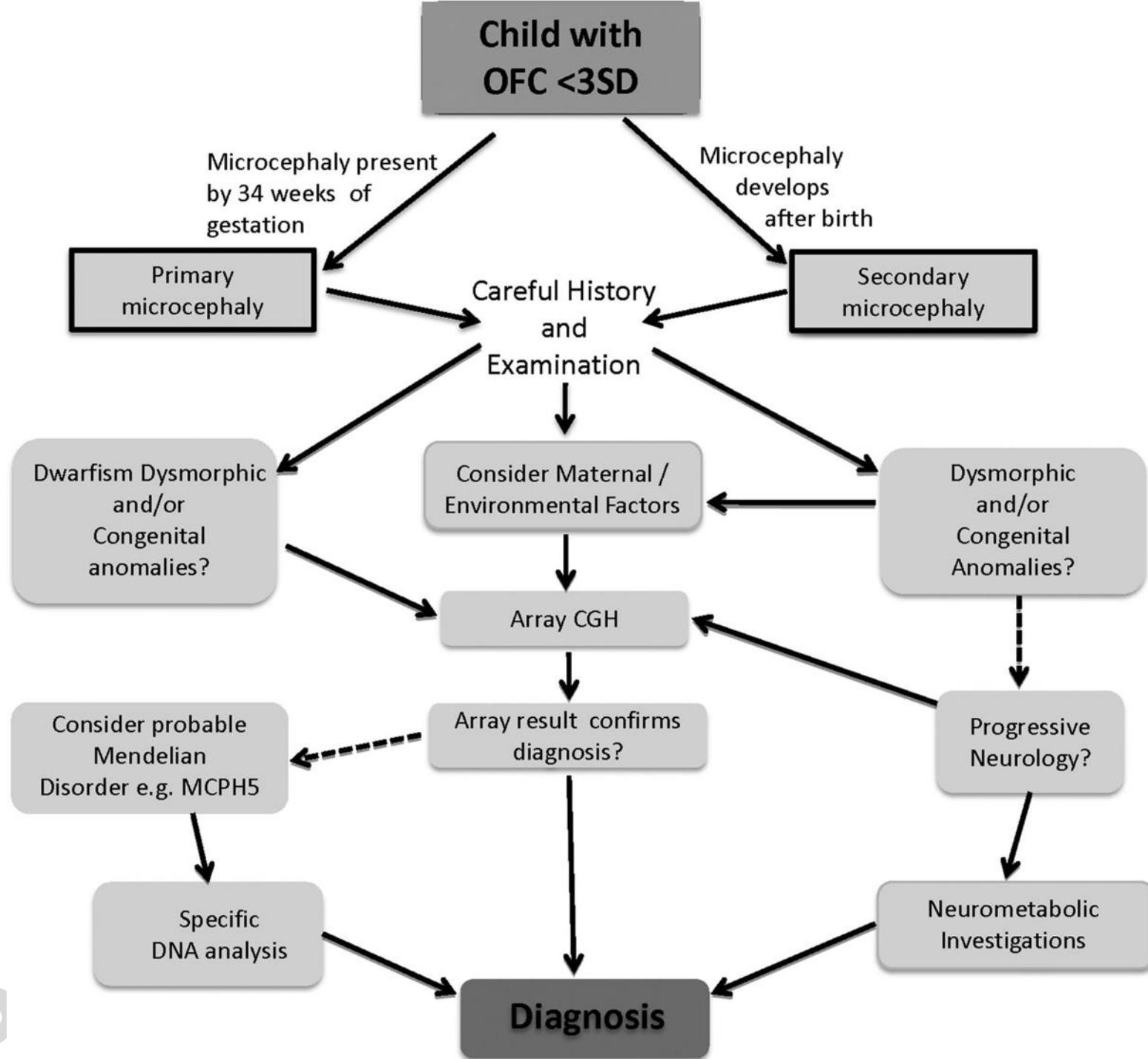
.... and Zika

“microcephaly”



- Description not a disease
- Reduced head circumference
 - -3SD
- variation: sex and age..... race?
-charts

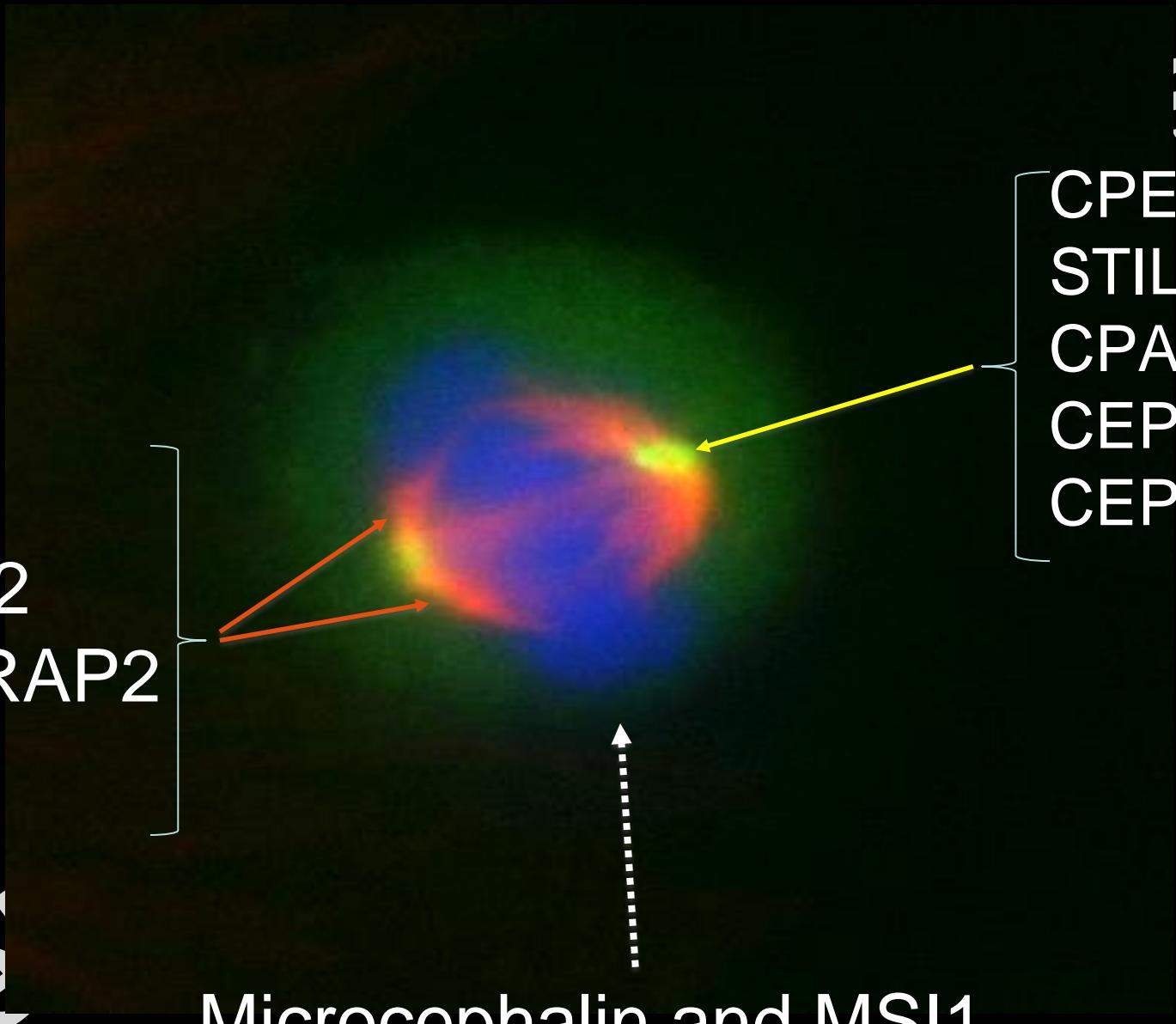




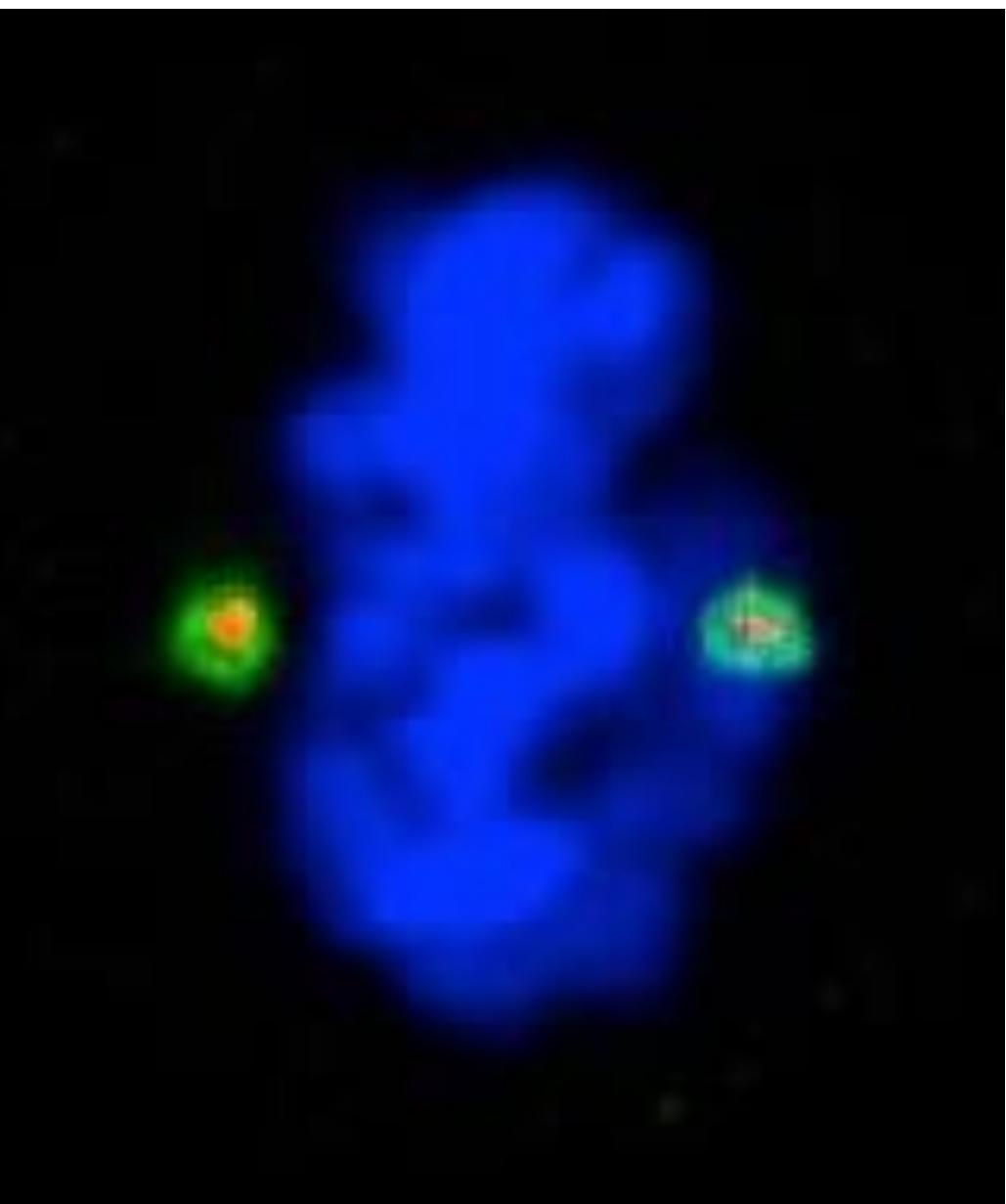


See

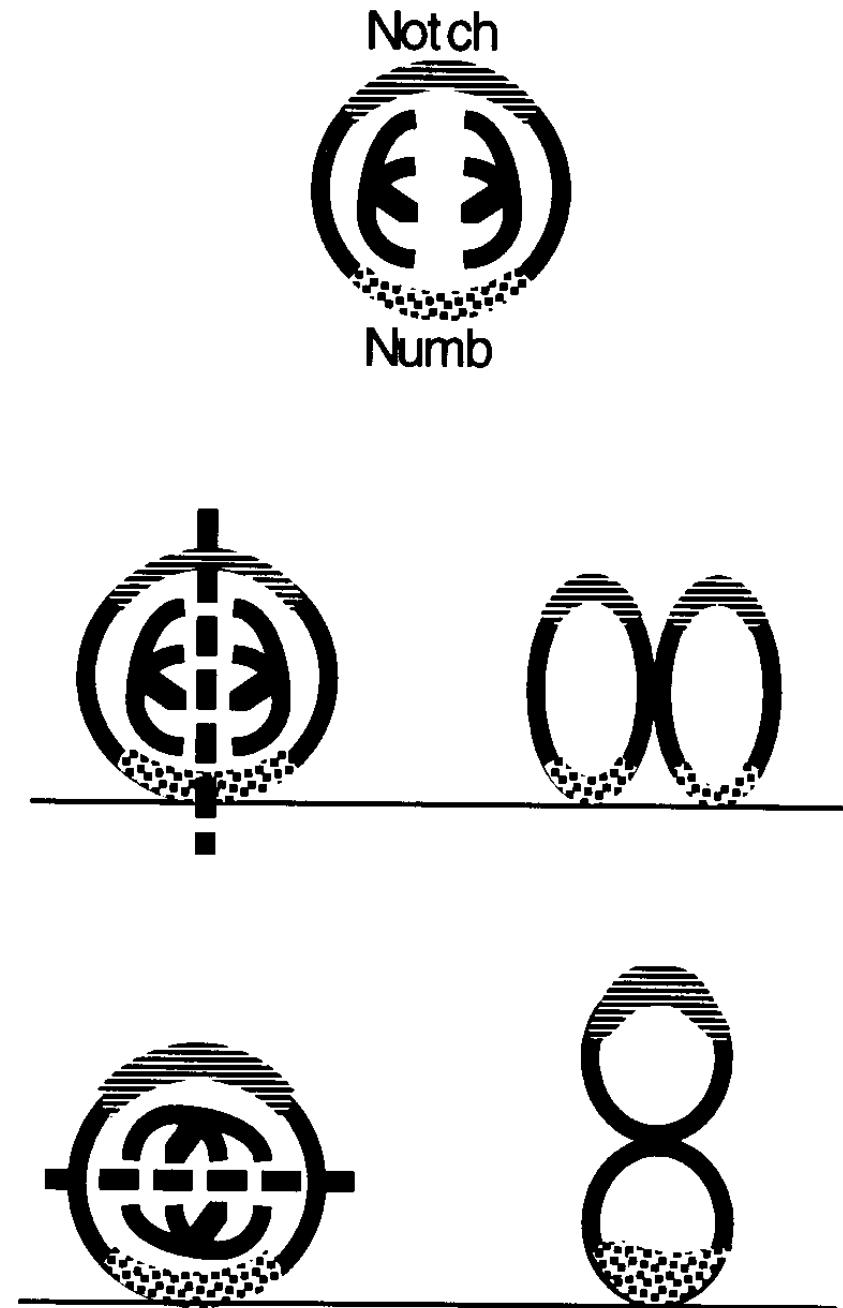
ASPM
WDR62
CDK5RAP2
KIF11



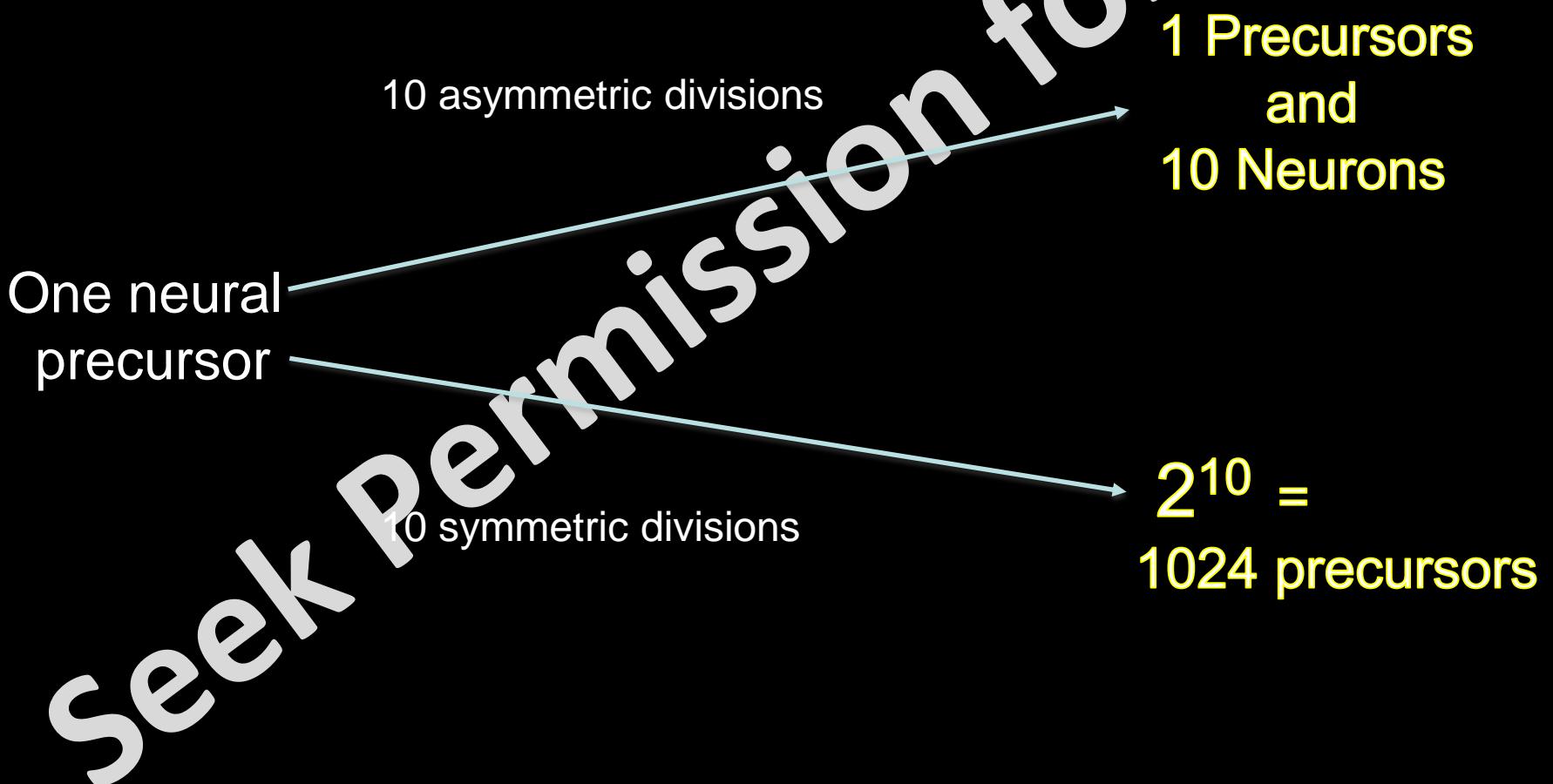
CPE152
STIL
CPAP
CEP63
CEP135

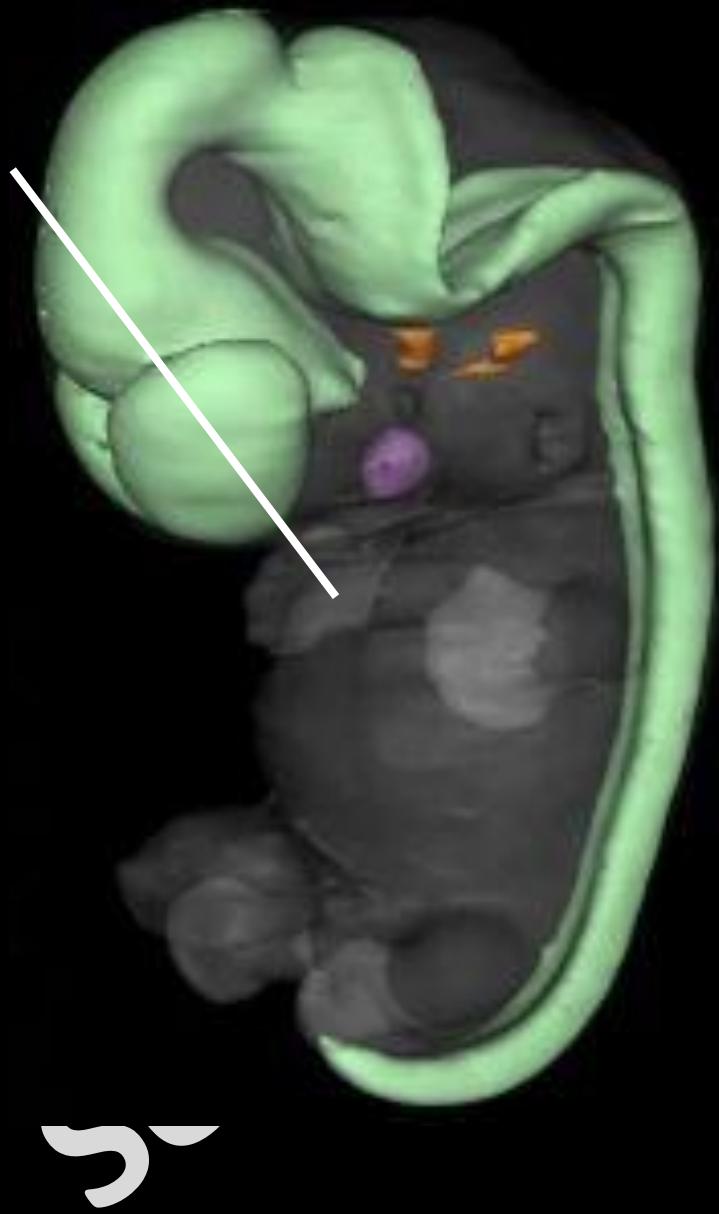


See



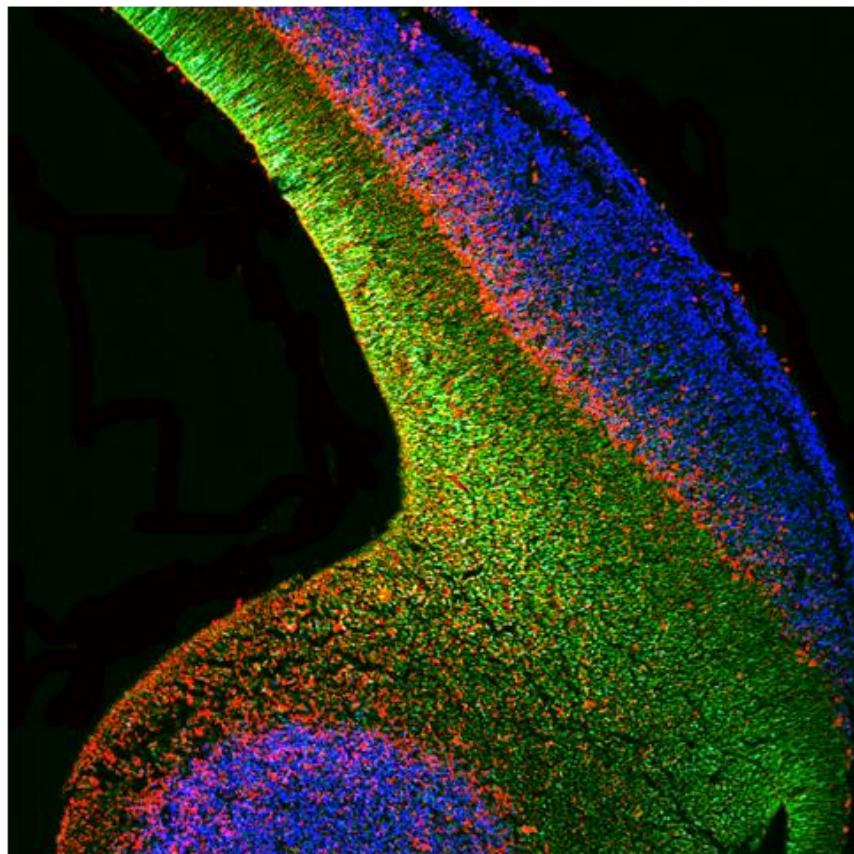
Symmetric versus Asymmetric



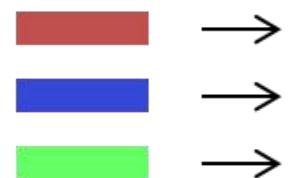
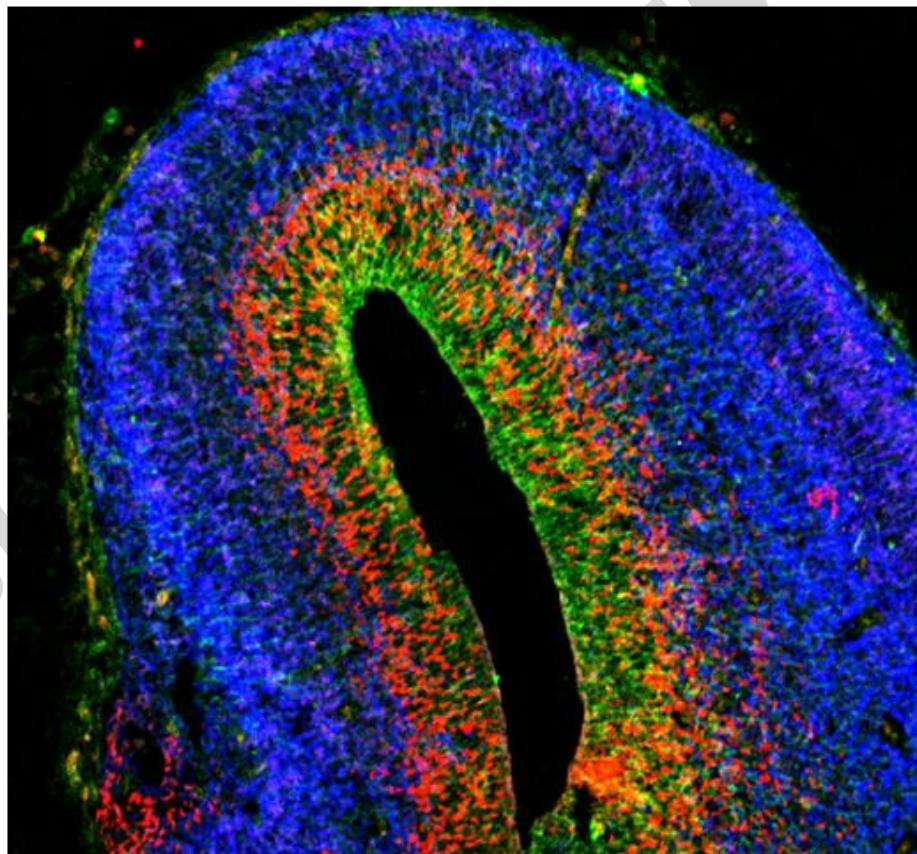


MISS

CS-22 human neuroepithelium



E14 mouse neuroepithelium



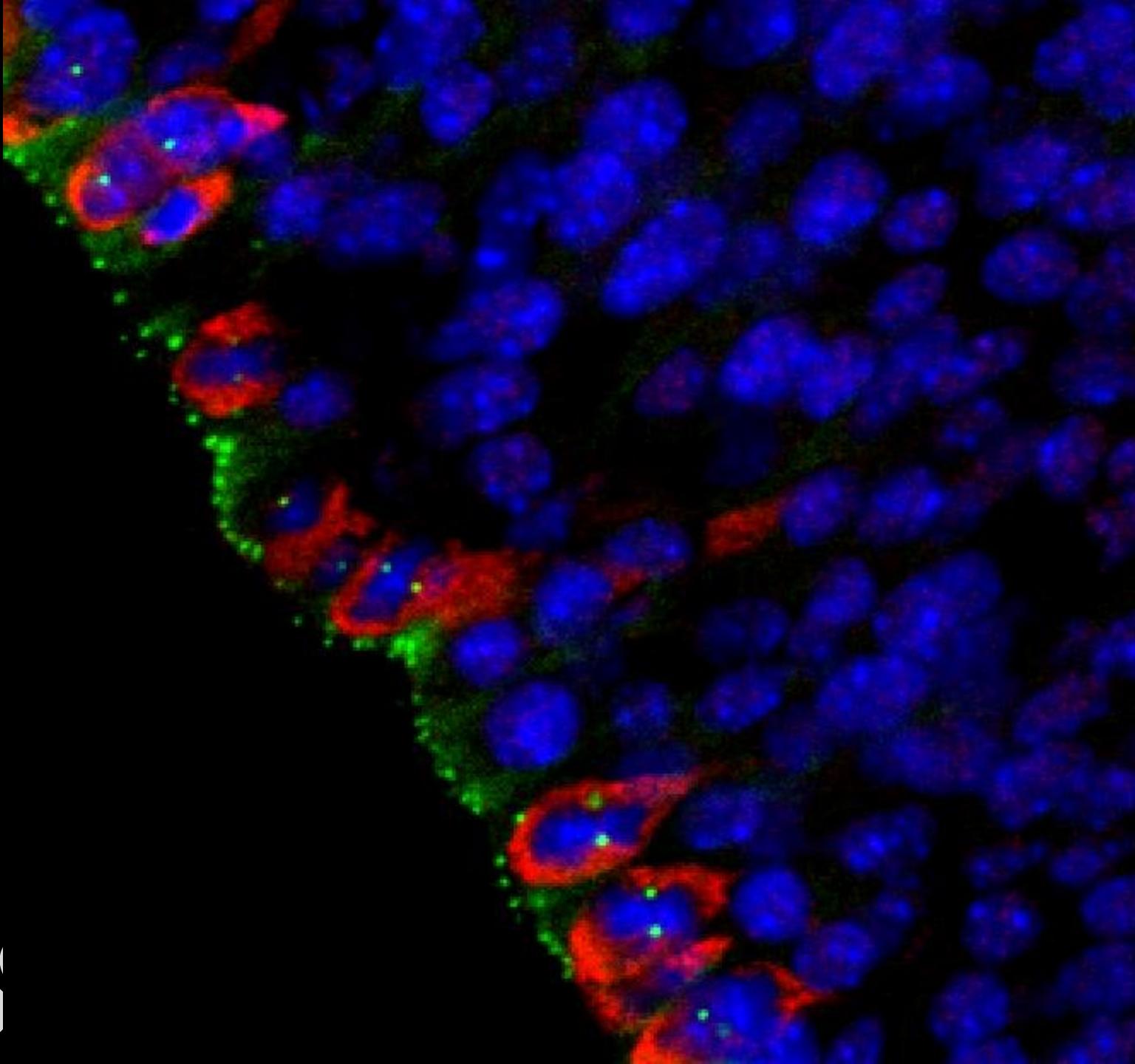
Tbr2

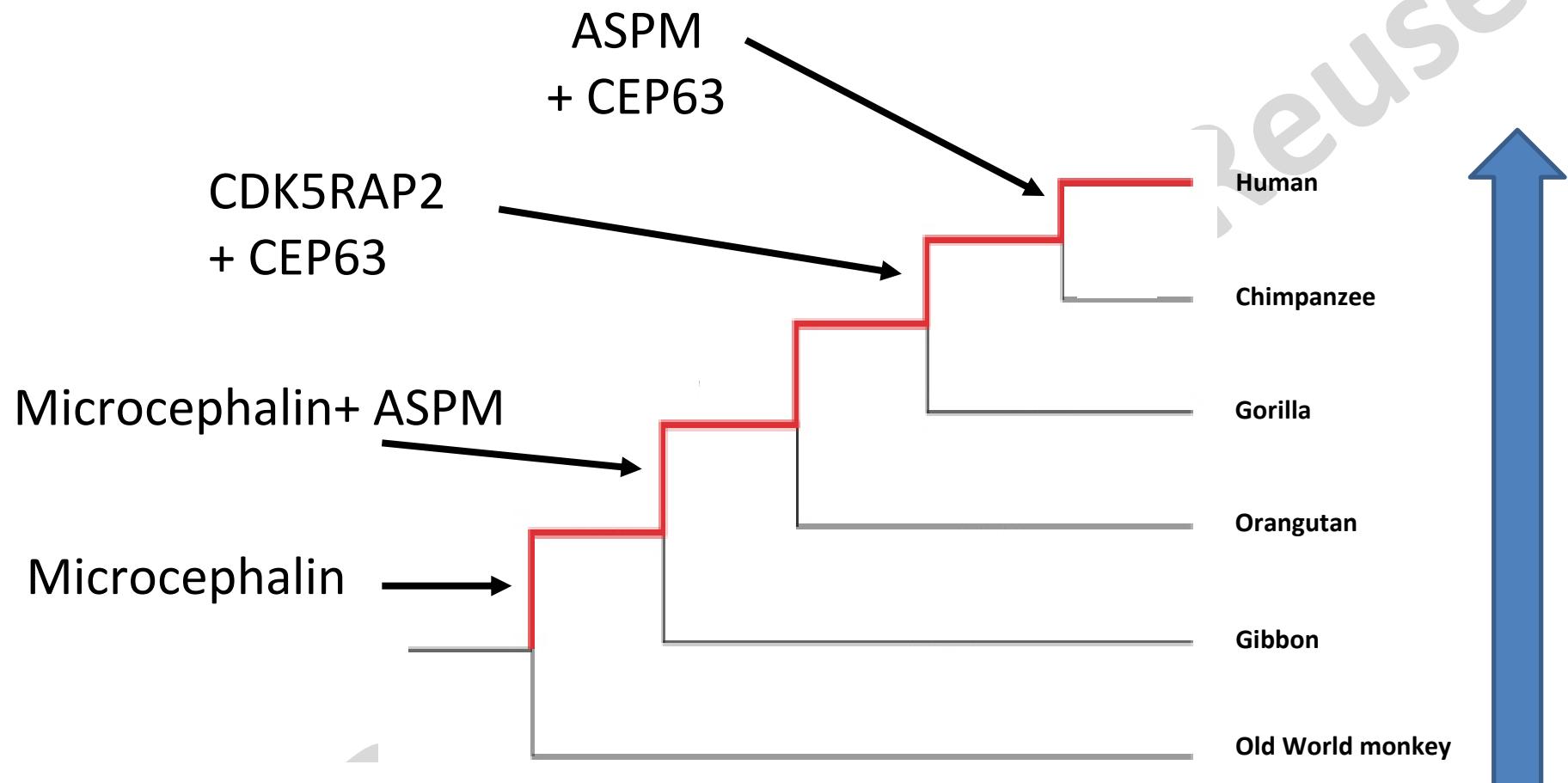
Tub β 3

Nestin

e

S

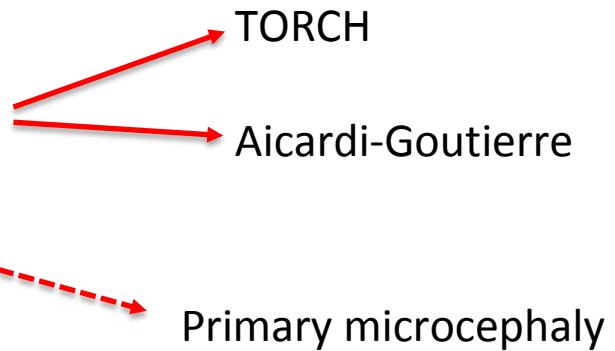




.... and Zika cerebral embryopathy



- Infection in the 1st + 2nd trimester
- crosses placental and blood/brain barrier
- enters neural cells and a Interferon reaction
- Disrupted Neurogenesis in neuroblasts



A photograph showing a close-up of a man's face and a chimpanzee's head from behind, both looking upwards. The man has white hair and a beard. The chimpanzee has dark fur. A faint watermark 'Hotchpotch.eu' is visible diagonally across the image.

Microcephaly

Clinical finding
Myriad of aetiologies
1st world = genetic
3rd world = mixed

Zika
TORCH infection
and
Primary Microcephaly