

Figure 1

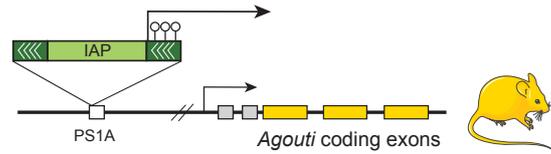
A

The *Agouti* viable yellow mouse model

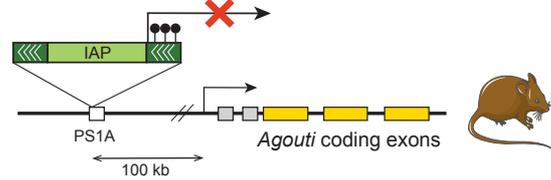


B

Active allele

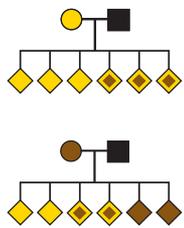


Inactive allele

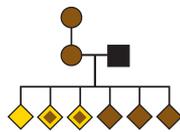


C

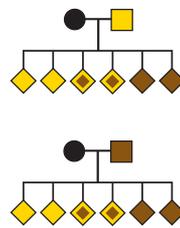
Maternal transmission



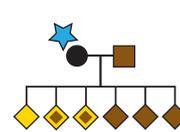
Grand-maternal effect



Paternal transmission



Methyl supplementation



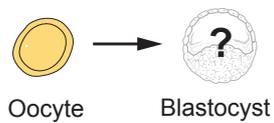
◆ Yellow A^y/a^*
◆ Mottled A^y/a^*
◆ Pseudoagouti A^y/a^*
◆ Congenic a/a^*
★ Maternal dietary methyl supplementation

* C57BL/6 genetic background

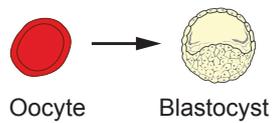
D

Maternal transmission

Yellow A^y/a dam

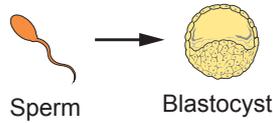


Pseudoagouti A^y/a dam



Paternal transmission

Yellow A^y/a sire



Pseudoagouti A^y/a sire

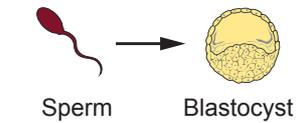
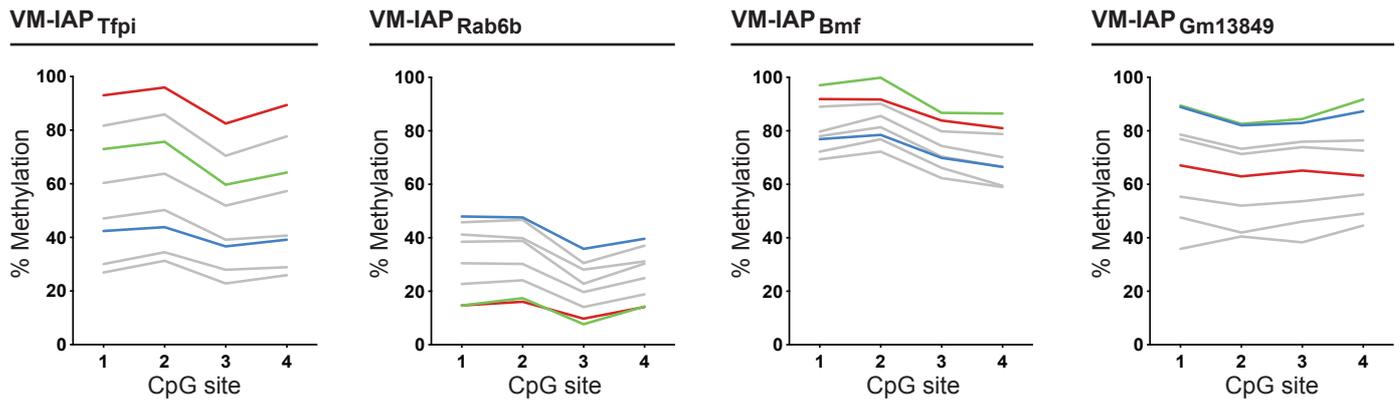
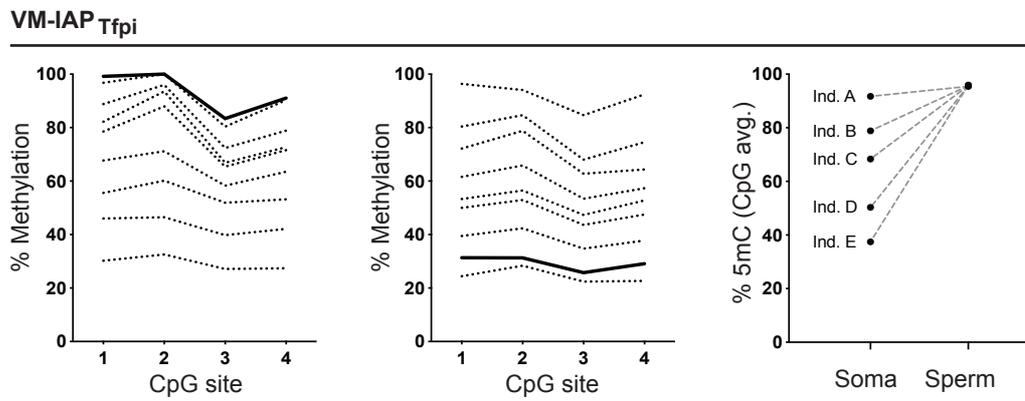


Figure 2

A — Indv. 1 — Indv. 2 — Indv. 3 — Other indivs.



B — Dam Offspring



C ○ Offspring ▼ Litter avg.

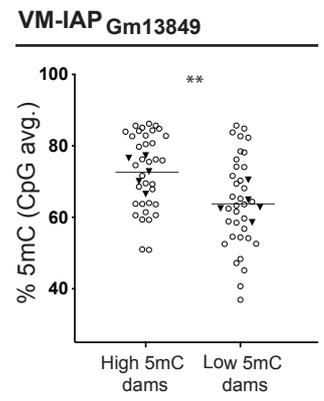
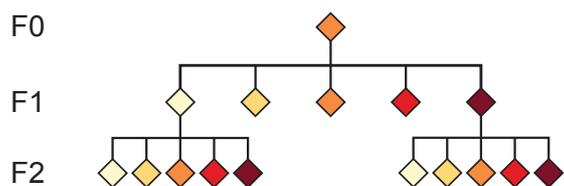


Figure 3

A

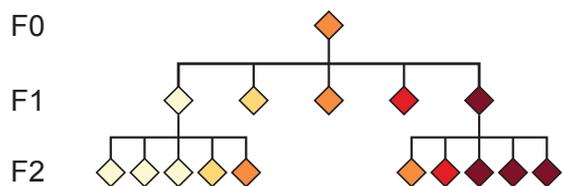
RECONSTRUCTION OF METASTABILITY



B

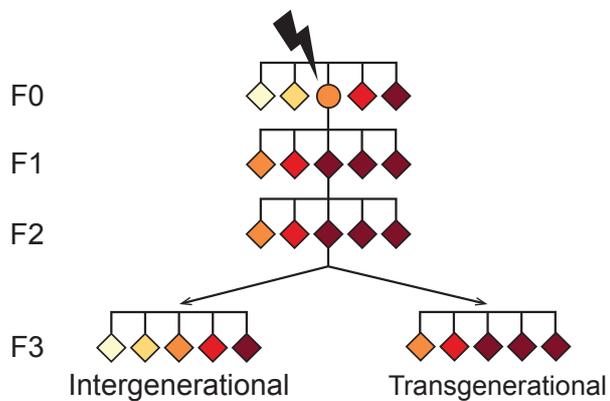
GENERATIONAL EPIGENETIC INHERITANCE

Innate

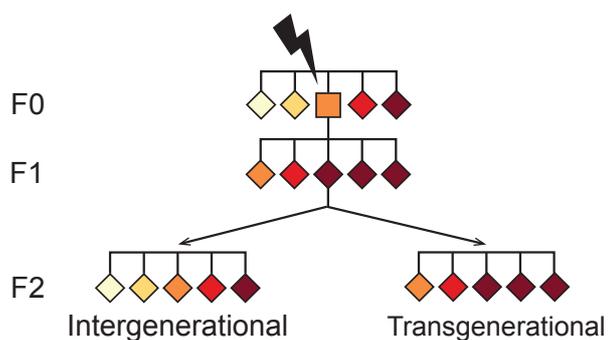


Induced

In utero maternal exposure



Paternal exposure



Epiallelic state



Genetic or envr. insult