

AIM: Partition in long-term contributions of the genetic trend through a fine partitioning in Mendelian samplings

$$\hat{u}_i = \frac{1}{2}\hat{u}_s + \frac{1}{2}\hat{u}_d + \hat{\phi}_i$$

Mendelian Sampling
(captures the “**originality**” of the animal)

RESULTS

The final genetic progress is largely given by the originality of the **females**



Mothers or grandmothers of AI males



Large number of descent

TAKE HOME MESSAGE

- A. **Females** are the main reservoir of genetic variability for selection
- B. **AI males** are important in the spread of the best genetics in the population

Yearly partition of the EBV milk yield by sex for Basco-Béarnaise

