



KEY INSIGHT

Mean and Variance are INDEPENDENT

- Systematic effects \rightarrow MEAN

- γ_{level} : baseline

- γ_{slope} : progression speed

- Random variation \rightarrow VARIANCE

- Ω_{λ} : same for all individuals

\rightarrow **These are SEPARABLE \rightarrow IDENTIFIABLE!**

TRUE PARAMETERS:

```
Gamma_level[0,:]:  
[0.5 0.3 0.1]
```

```
Gamma_slope[0,:]:  
[0.02 0.015 0.005] /year
```

GROUPS:
High PRS: 307 indiv
Low PRS: 305 indiv

EFFECT SIZES:
Level diff: 1.185
Slope diff: 2.205
Over 50 years!