

# Generative model: $H \rightarrow W$

$$W = \beta H + U$$

Generative code:

R code  
3.2

```
# function to simulate weights of individuals from height
sim_weight <- function(H,b,sd) {
  U <- rnorm( length(H) , 0 , sd )
  W <- b*H + U
  return(W)
}
```