Describing models

```
# 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)
}</pre>
```

$$W_i = \beta H_i + U_i$$
 $U_i \sim \text{Normal}(0, \sigma)$
 $H_i \sim \text{Uniform}(130, 170)$