

$$\begin{array}{c}
 y_i \sim \text{Normal}(\theta_i, \sigma^2) \\
 \downarrow \quad \quad \quad \hookrightarrow \sigma^2 \sim \text{InvGamma}(\alpha_0, \beta_0) \\
 \theta_i = \beta_0 + \beta_1 x_{i1} + \beta_2 x_{i2} \\
 \downarrow \quad \quad \quad \hookrightarrow \beta_2 \sim \text{Normal}(\mu_{\beta_2}, \sigma_{\beta_2}^2) \\
 \quad \quad \quad \hookrightarrow \beta_1 \sim \text{Normal}(\mu_{\beta_1}, \sigma_{\beta_1}^2) \\
 \quad \quad \quad \downarrow \beta_0 \sim \text{Normal}(\mu_{\beta_0}, \sigma_{\beta_0}^2)
 \end{array}$$

Alternatively...

$$\theta_i = \mathbf{X}_i \boldsymbol{\beta} \longrightarrow \boldsymbol{\beta} \sim \text{MVN}(\boldsymbol{\mu}_\beta, \boldsymbol{\Sigma}_\beta)$$