



$$\mu_h \sim \text{Uniform}(0.5, 1)$$

$$\mu_{fa} \sim \text{Uniform}(0, 0.5)$$

$$\delta \sim \text{Uniform}(0, 0.5)$$

$$\mu_h^A \leftarrow \mu_h + \frac{\delta}{2}$$

$$\mu_h^B \leftarrow \mu_h - \frac{\delta}{2}$$

$$\mu_{fa}^A \leftarrow \mu_{fa} - \frac{\delta}{2}$$

$$\mu_{fa}^B \leftarrow \mu_{fa} + \frac{\delta}{2}$$

$$\sigma_i^A, \sigma_i^B \sim \text{Uniform}(0, 0.5)$$

$$\theta_{ij}^A \sim \text{Gaussian}(\mu_i^A, \sigma_i^A)$$

$$\theta_{ij}^B \sim \text{Gaussian}(\mu_i^B, \sigma_i^B)$$

$$y_{ij}^A \sim \text{Binomial}(\theta_{ij}^A, n^A)$$

$$y_{ij}^B \sim \text{Binomial}(\theta_{ij}^B, n^B)$$