FI Meeting

July 30, 2021

Batch	# of Animals
1	240
2	211
3	396

$$
\begin{aligned}
y_i \quad &= \mu + \mathbf{x}_{i,\text{fixed}}^T \boldsymbol{\beta} + u_{\text{tester}[i]} + u_{\text{batch}[i]} + \epsilon_i, \quad 1 \leq i \leq n \\
\epsilon_i &\sim N(0, \sigma^2) \\
u_{\text{tester}} &\sim N(0, \tau^2_{\text{tester}}) \\
u_{\text{batch}} &\sim N(0, \gamma^2_{\text{batch}})
\end{aligned}
$$

- $(\hat{\sigma}, \hat{\tau}_{\text{tester}}, \hat{\gamma}_{\text{batch}}) = (2.17, 0.98, 0.84)$
- $(u_{\text{tester}[1]}, u_{\text{tester}[2]}, u_{\text{tester}[3]}, u_{\text{tester}[4]}) = (-1.2, 0.54, -0.28, 0.84)$
- $(u_{\text{batch}[1]}, u_{\text{batch}[2]}, u_{\text{batch}[3]}) = (-0.56, -0.37, 0.94)$