Compare Biological vs Technical Replicates

Biological Replicates

$$\text{Average} = \mu + \frac{5 - 1 + 4 + 2 - 5}{5} + \frac{-2 + 5 + 2 - 2 - 1}{5} \xrightarrow{\text{The more samples you do...}} = \mu$$

The more samples you do...

This tells you about all mice.

No Biological Replicates

$$\text{Average} = \mu + 5 + \frac{-2 + 5 + 2 - 2 - 1}{5} \xrightarrow{\text{The more samples you do...}} = \mu + 5$$

The more samples you do...

This tells you about one mouse, but not about all mice.