Neural Data Science Spring 2022
Homework 2

We will continue to work with “HW1_2022_data.xlsx”.

Consider that you have collected these data, perhaps from a recognition memory task, as a pilot study in your lab.

You would like to use these as pilot data to support a power analysis for using this task in an NIH application.

Carry out a power analysis aimed at determining the sample size that would give you 80% power to detect an overall difference between wild-type and knockouts equal to or greater than the effect you observed in your pilot experiment. The "`pwr.t.test`" command from the `pwr` library is your friend. You may specify a one-sided or two-sided alternative; justify your choice.

In your planned experiment, you are only going to test each mouse once. You should consider how to take into account that your pilot data has 3 trials per mouse. (You used different stimuli on each trial, so you can consider the 3 trials to be independent of one another.)

You should submit via Slack DM your R code, that starts with the unedited HW1_2022_data.xlsx, as well as the text you would include in your grant, before the beginning of class **February 7**.