



# **RATS-5 NEUROSCIENCE RESEARCH**

## *EXPLORATORY DATA ANALYSIS*

**Fortin Lab UCI**

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# Our Goal

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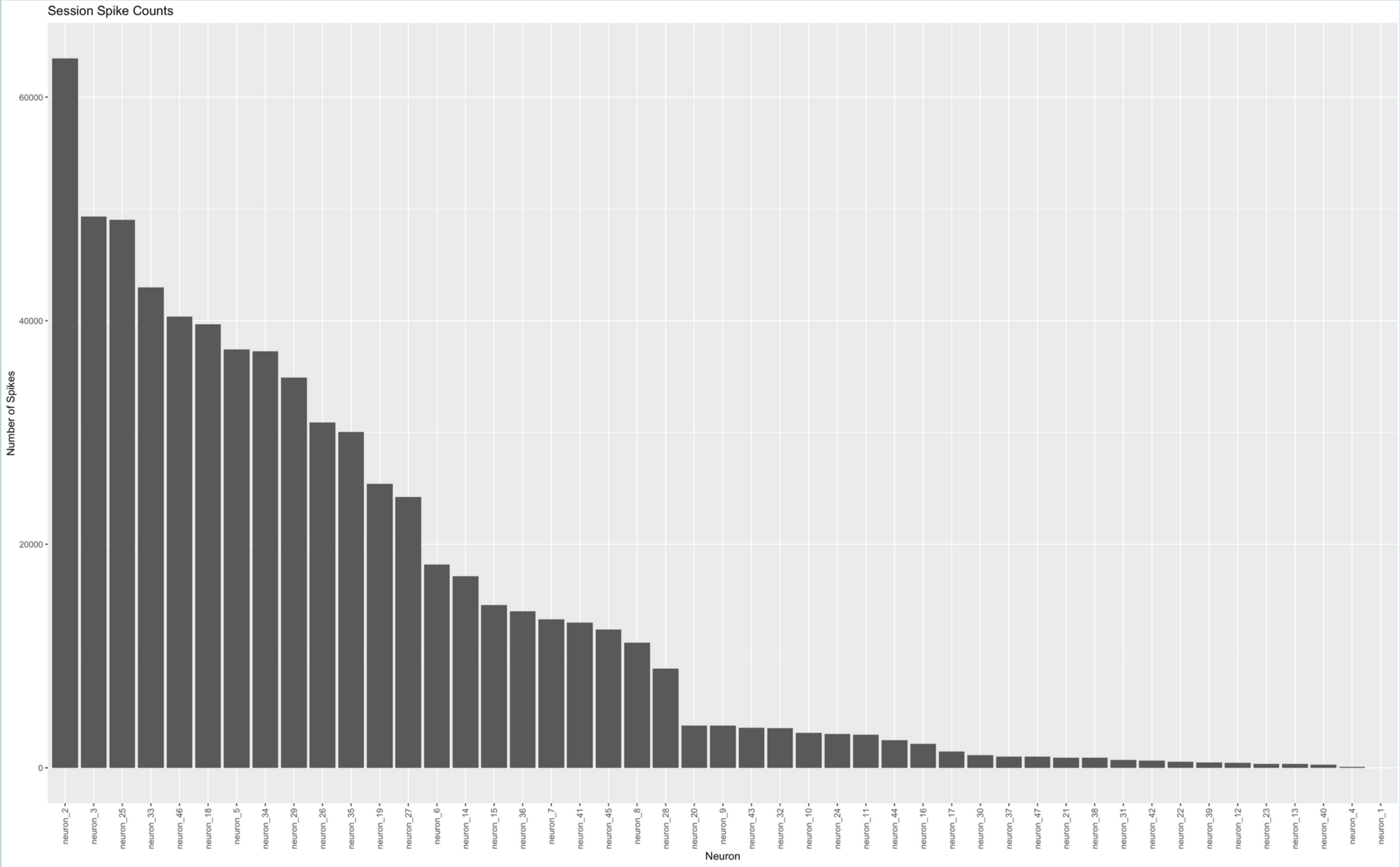
To determine whether the hippocampal neurons “replay” sequential relationships between odors

# What we did

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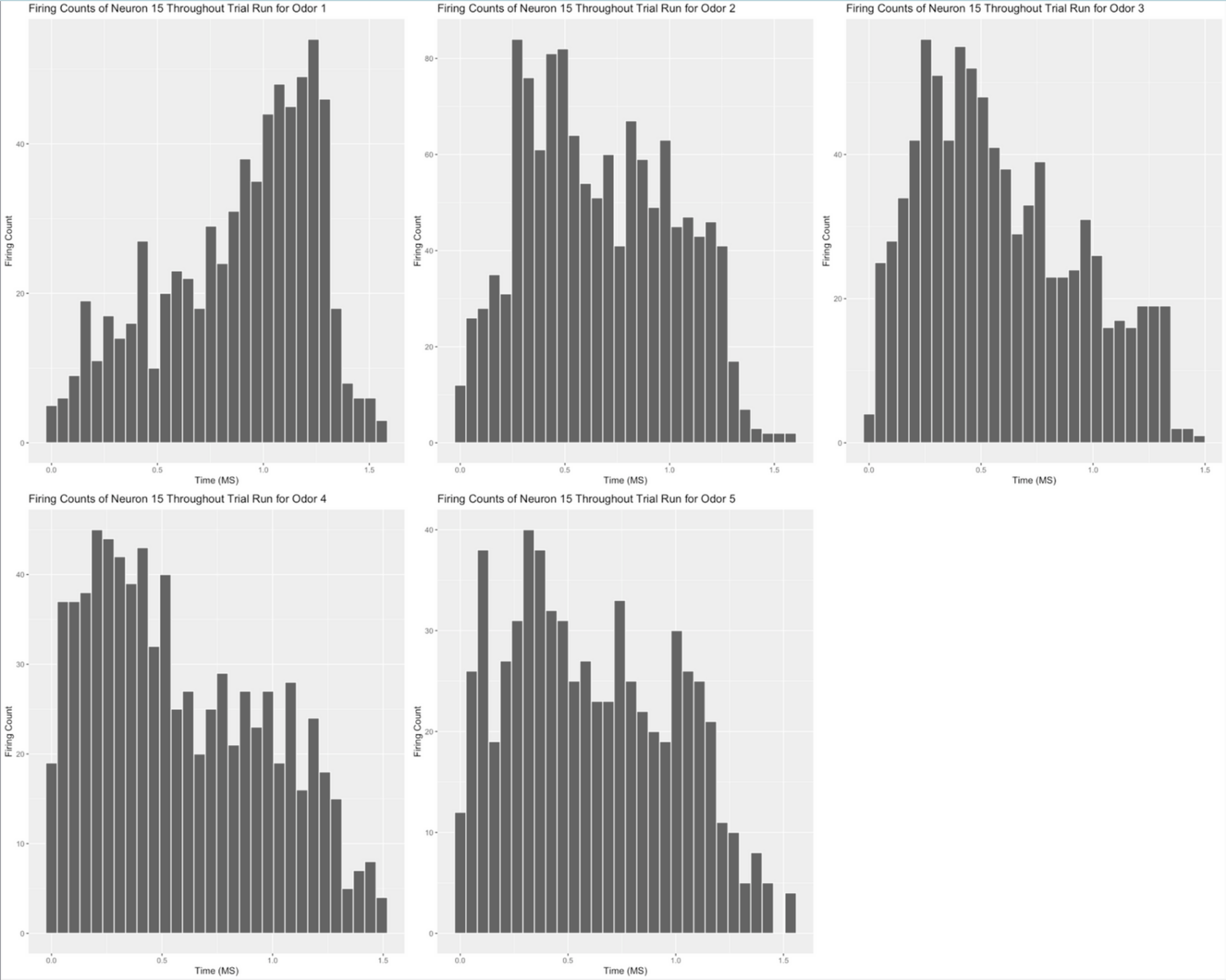
- Visualize the data of the total number of spikes for each neuron for all trials
- Determine when the odor is presented
- Create a peri-stimulus time histogram (PSTH) to see if there's a pattern within the neurons for each trial

# Total Number of Spike Counts of Neurons For All Trials



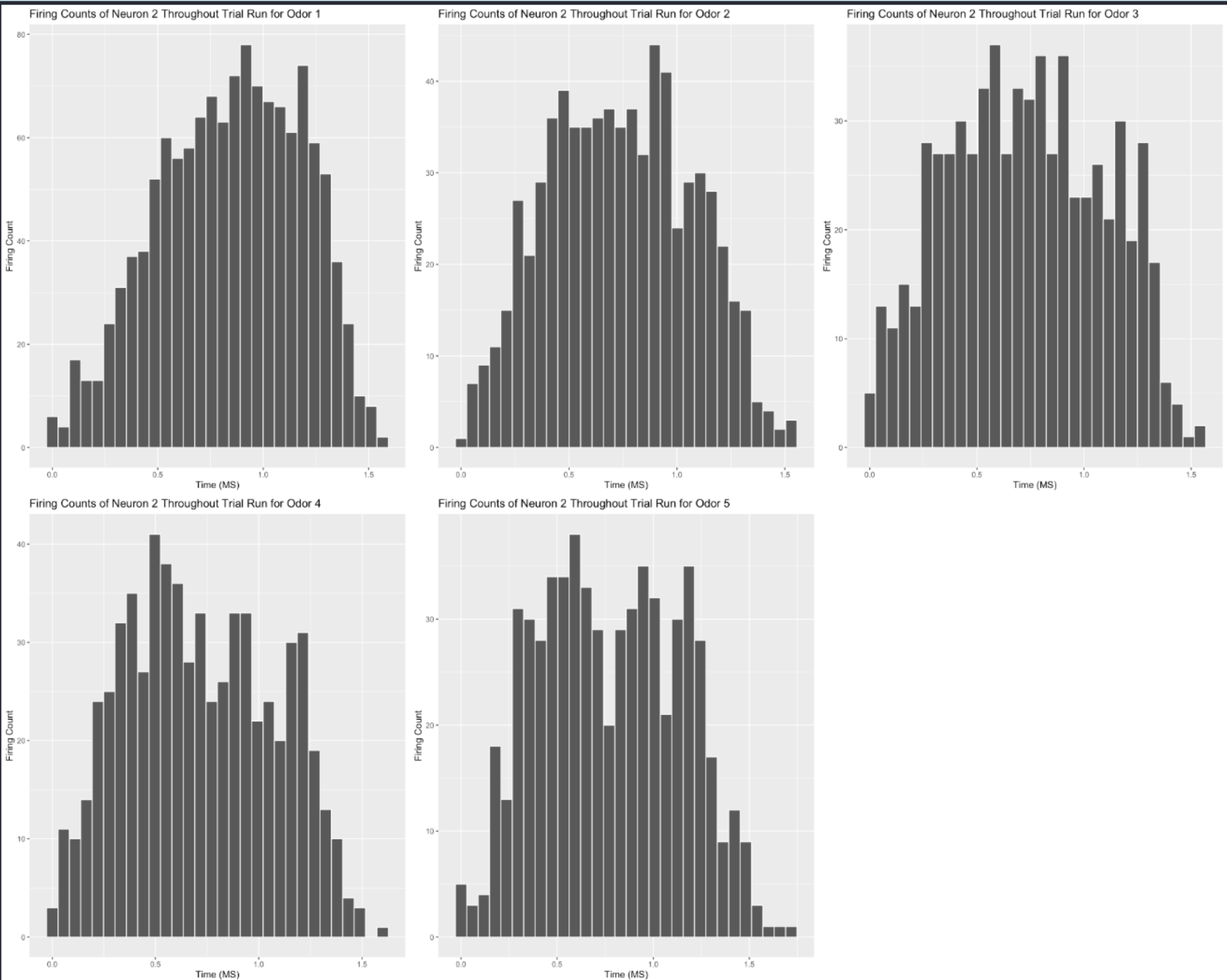
# Peristimulus Time Histogram (PSTH)

PSTH for Neuron 15 for Odors 1 - 5.



# Peristimulus Time Histogram (PSTH)

PSTH for Neuron 2 for Odors 1 - 5.



**Thank you!**

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