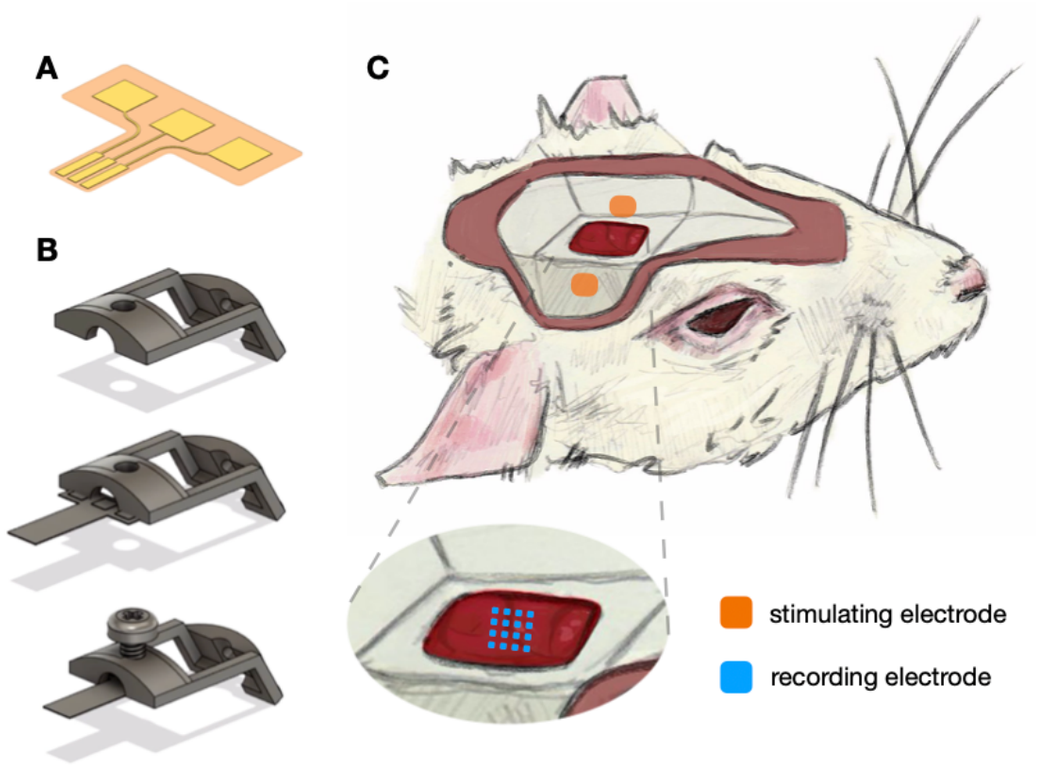
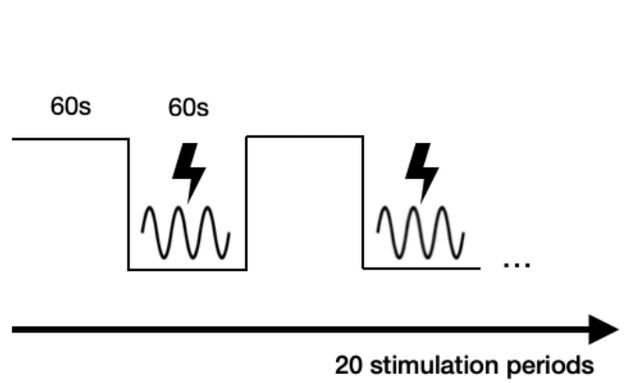
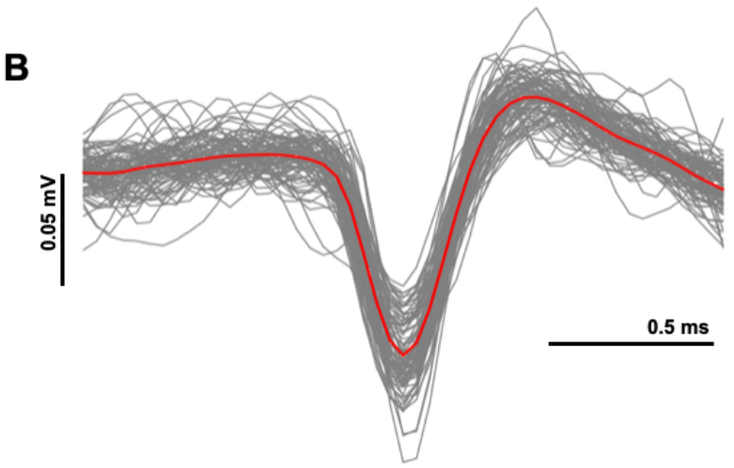


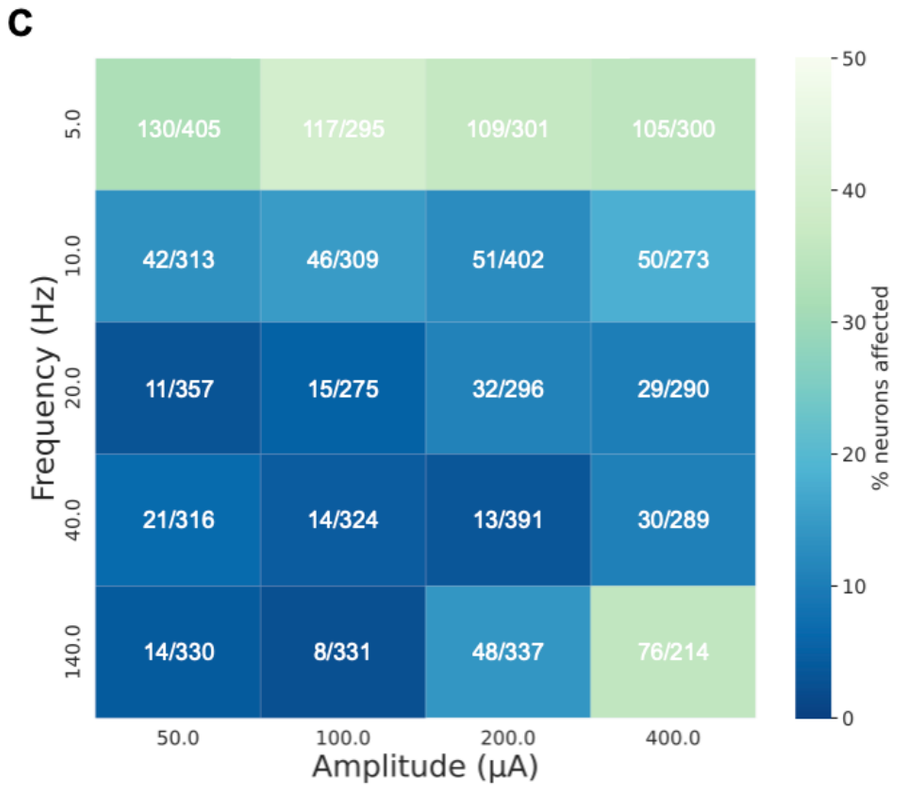


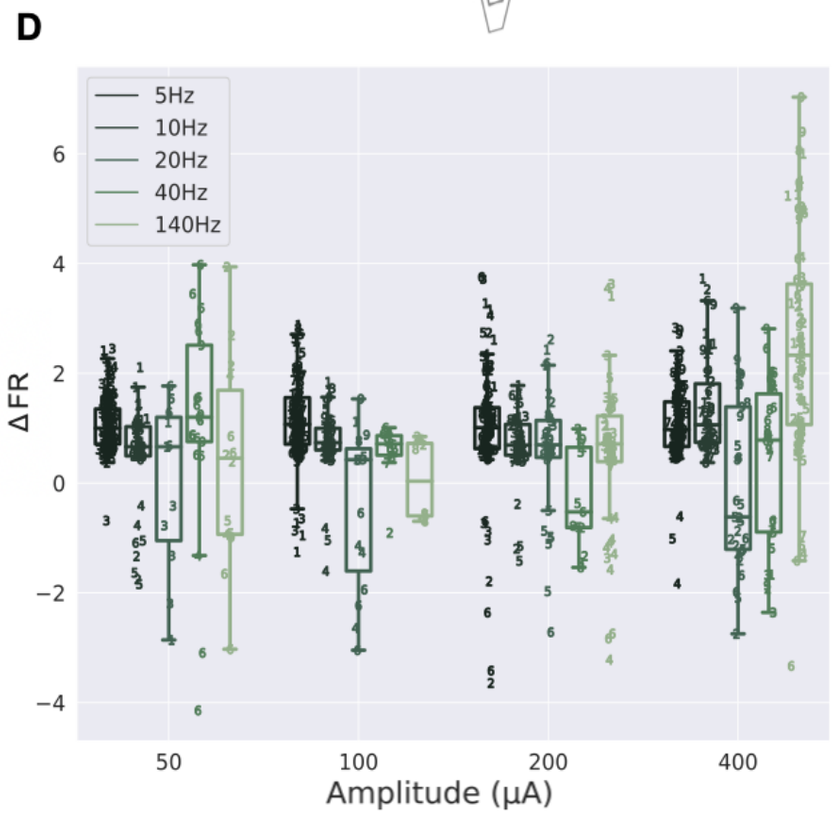
Group	Amplitudes (μA)	Frequencies (Hz)
Training	50, 100, 200, 400	5, 10, 15, 20, 40, 140
Testing	50, 100, 200, 400	1, 7, 15, 30, 90

- 4x4 microelectrode array recorded electrophysiological signals from layer 2/3 of somatosensory cortex
- Rats anaesthetized under light propofol (44.0 mg/kg/hr)

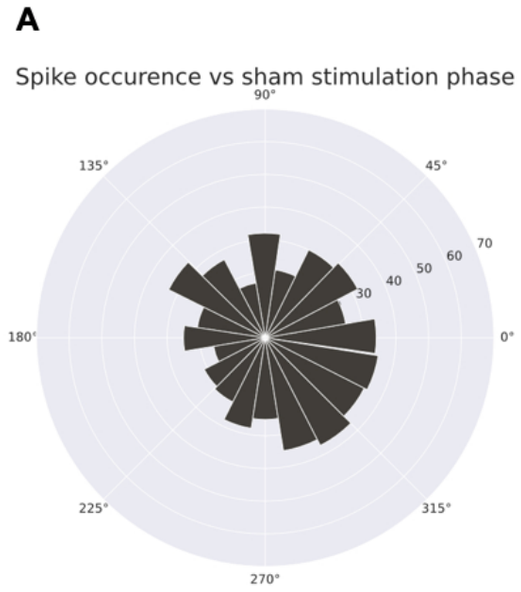
Firing rate (FR) results

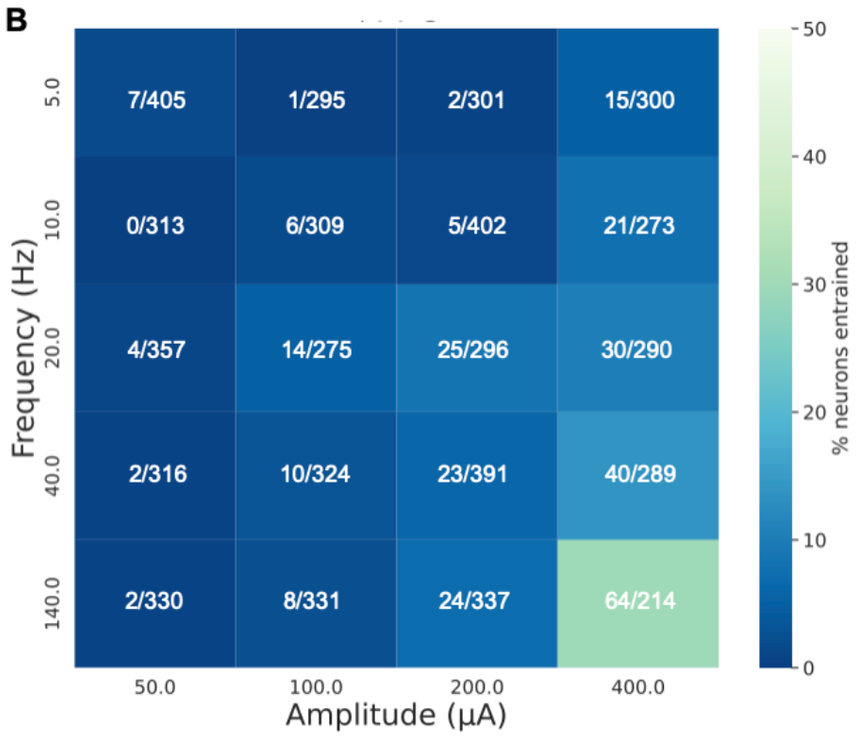


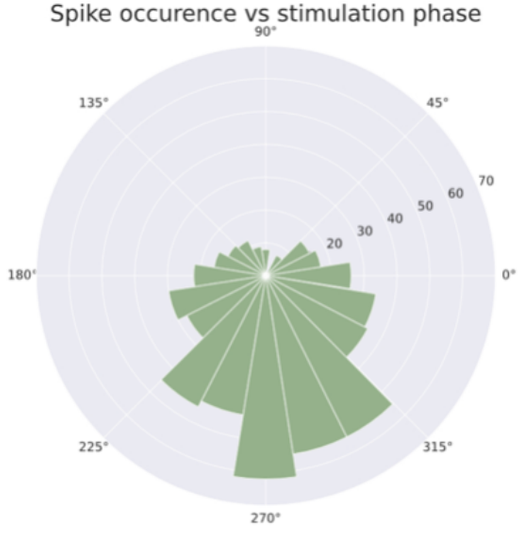


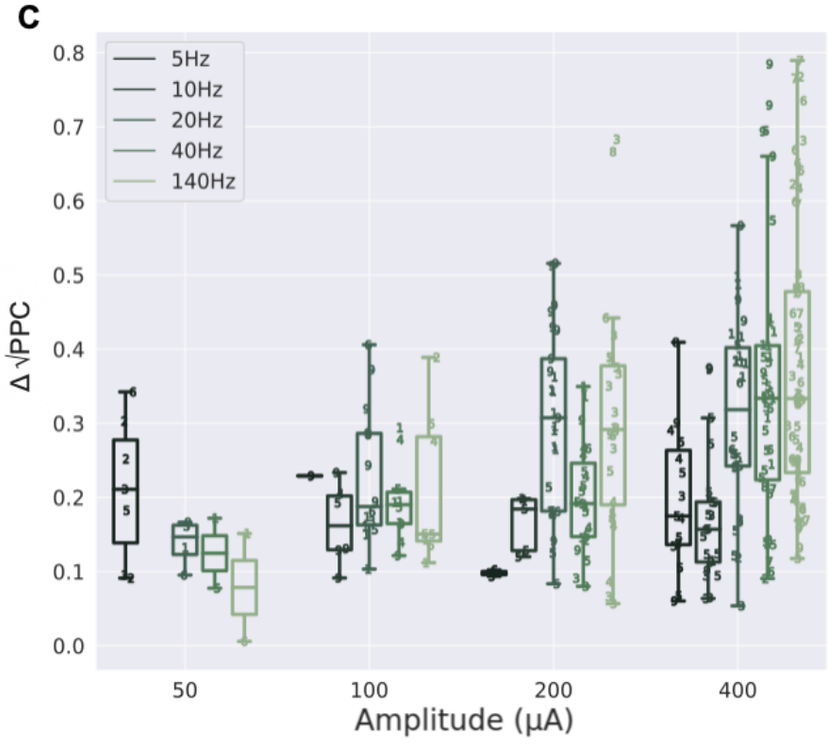


Pairwise phase consistency (PPC) results

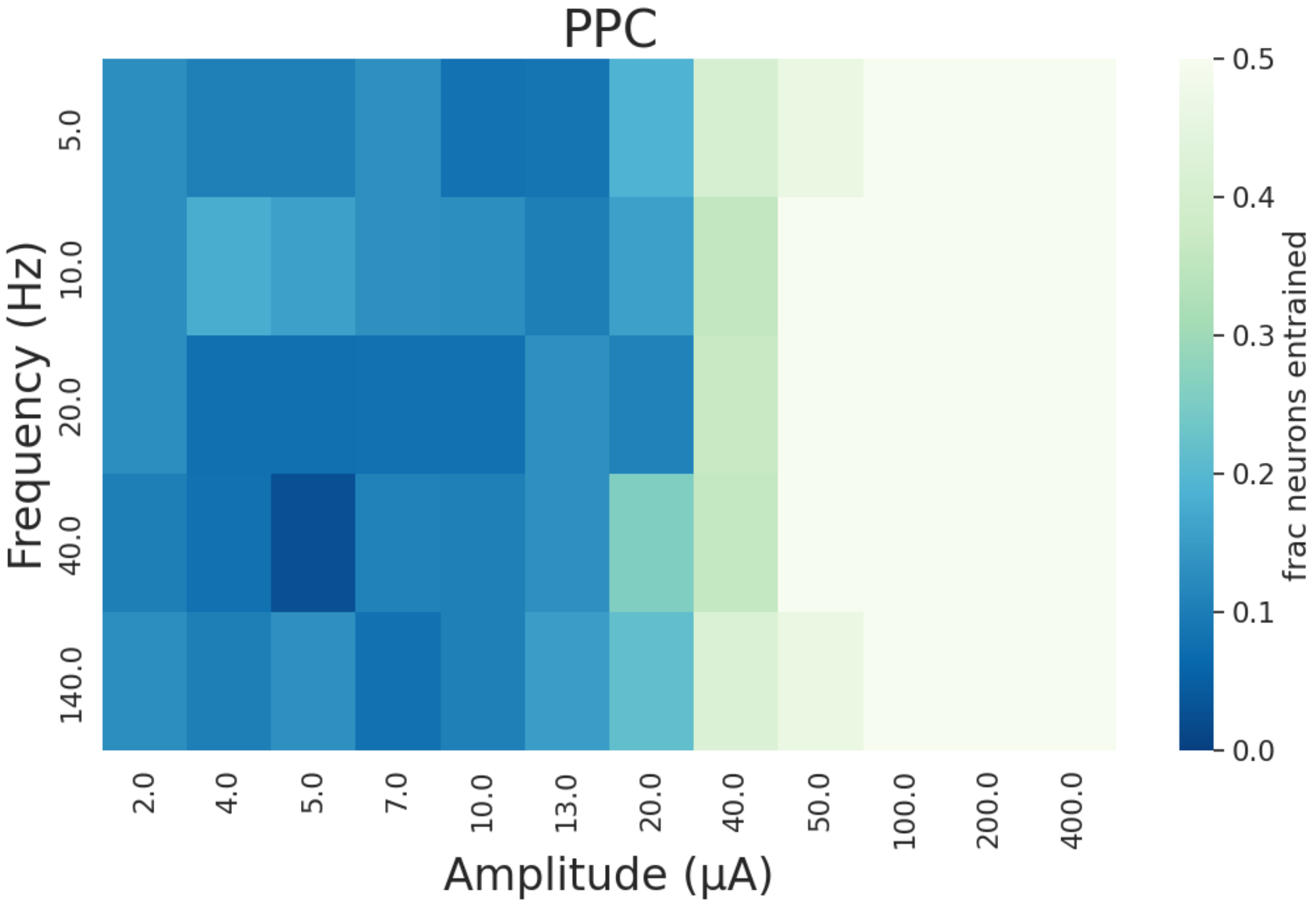




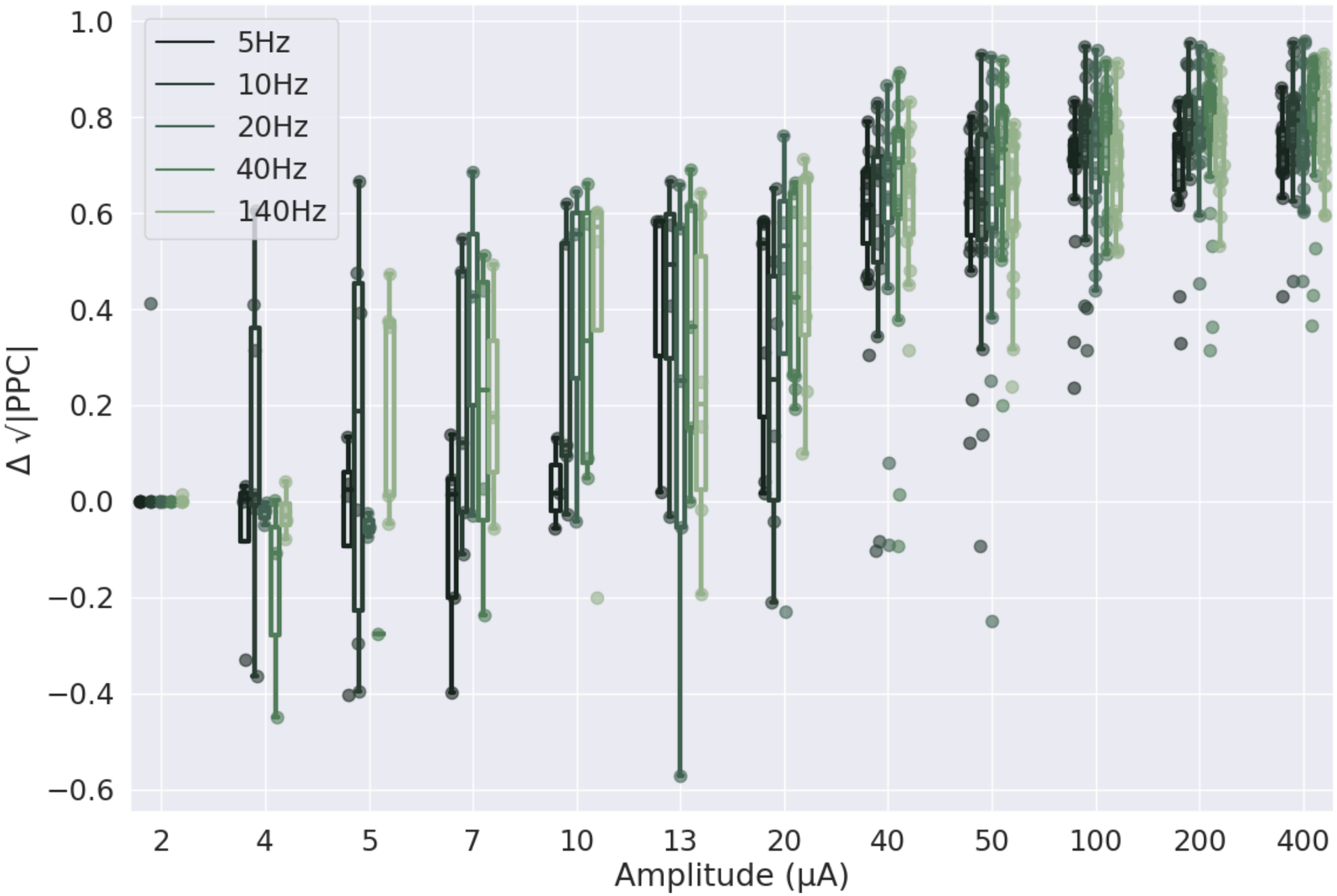




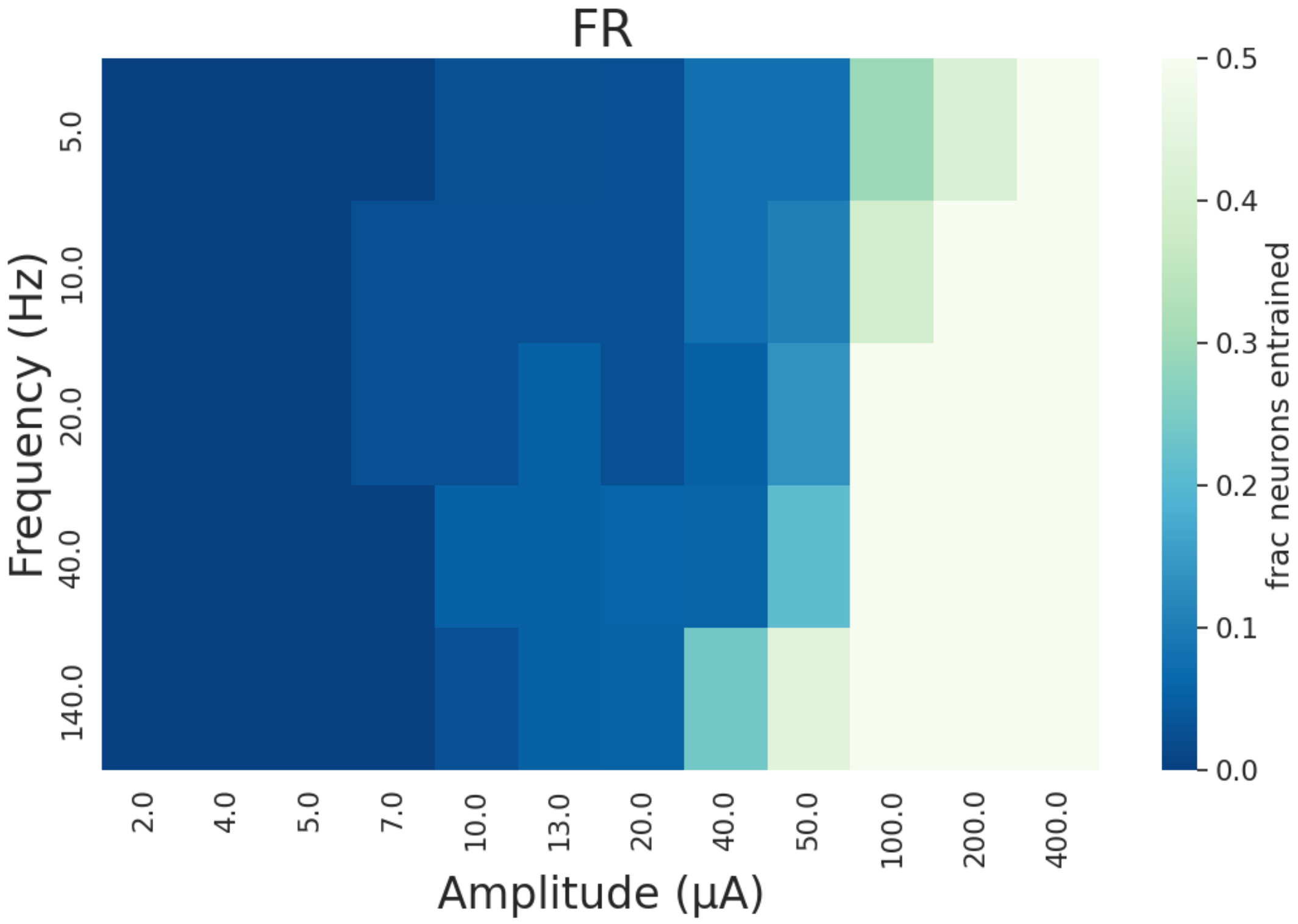
Pairwise phase consistency (PPC) sim results



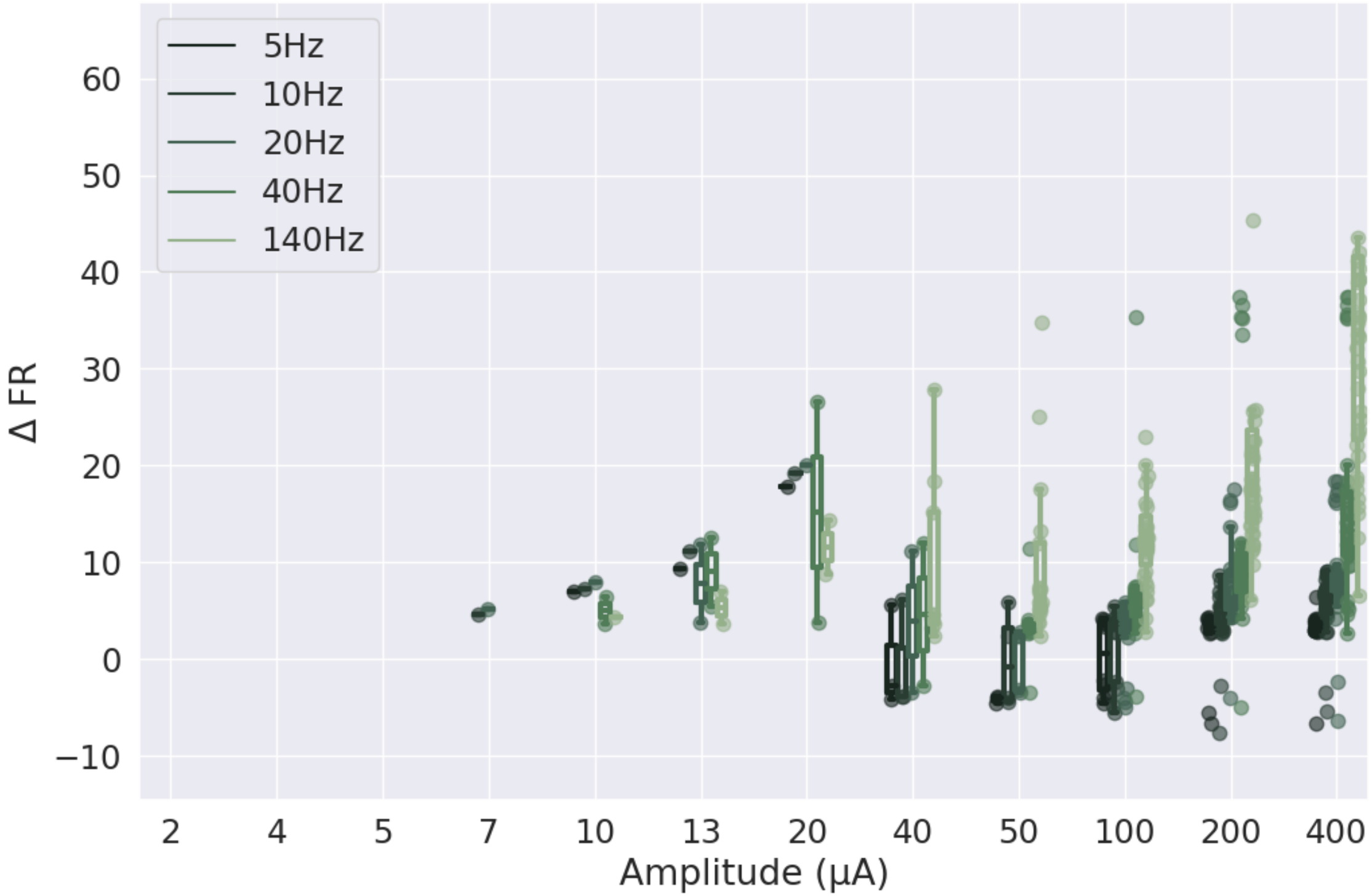
Pairwise phase consistency (PPC) sim results



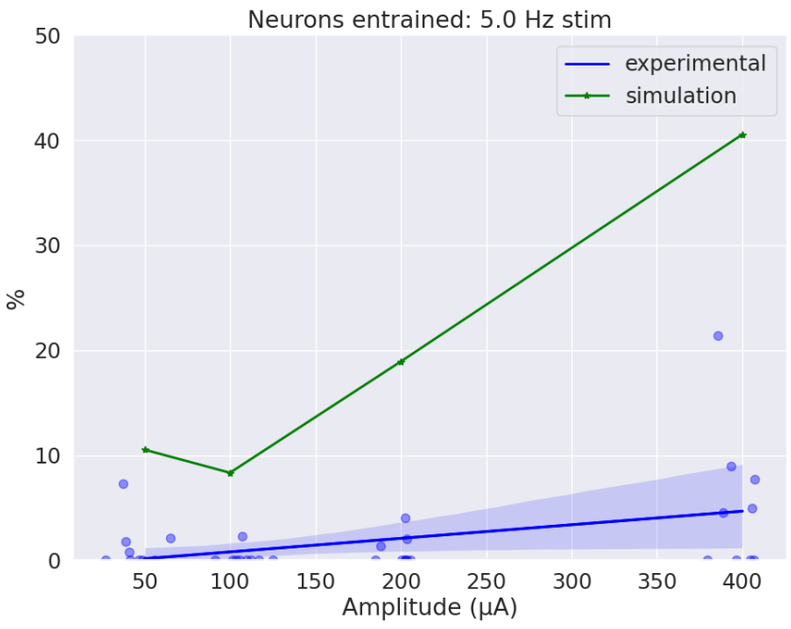
Firing rate (FR) sim results

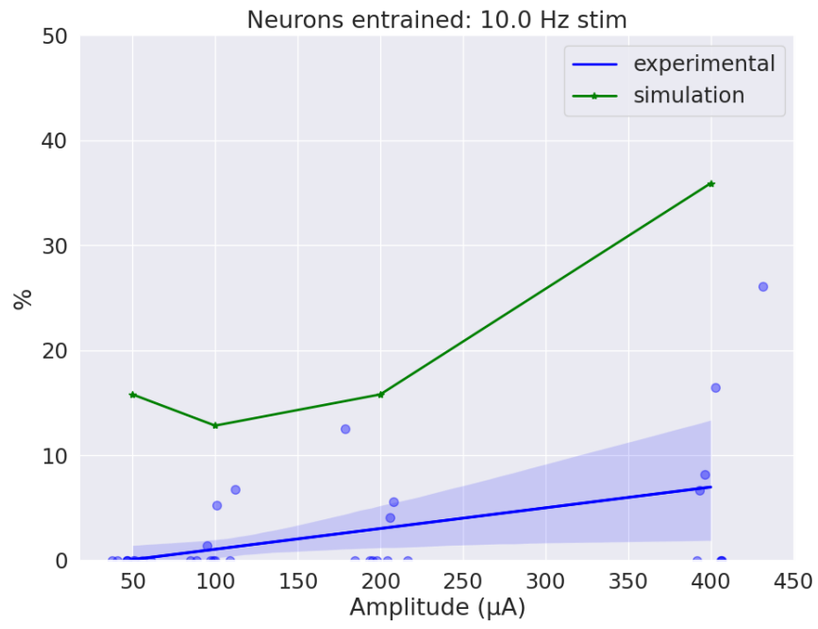


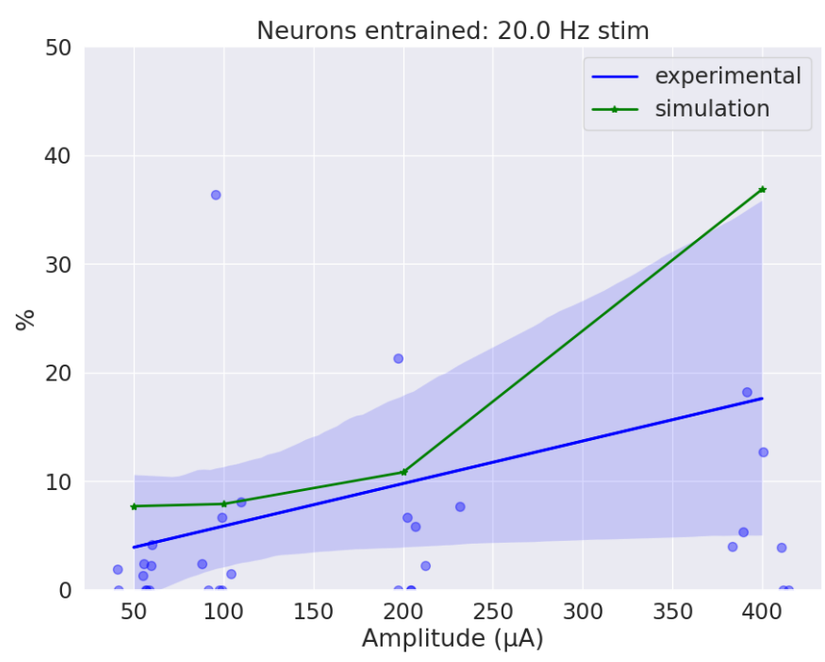
Firing rate (FR) sim results

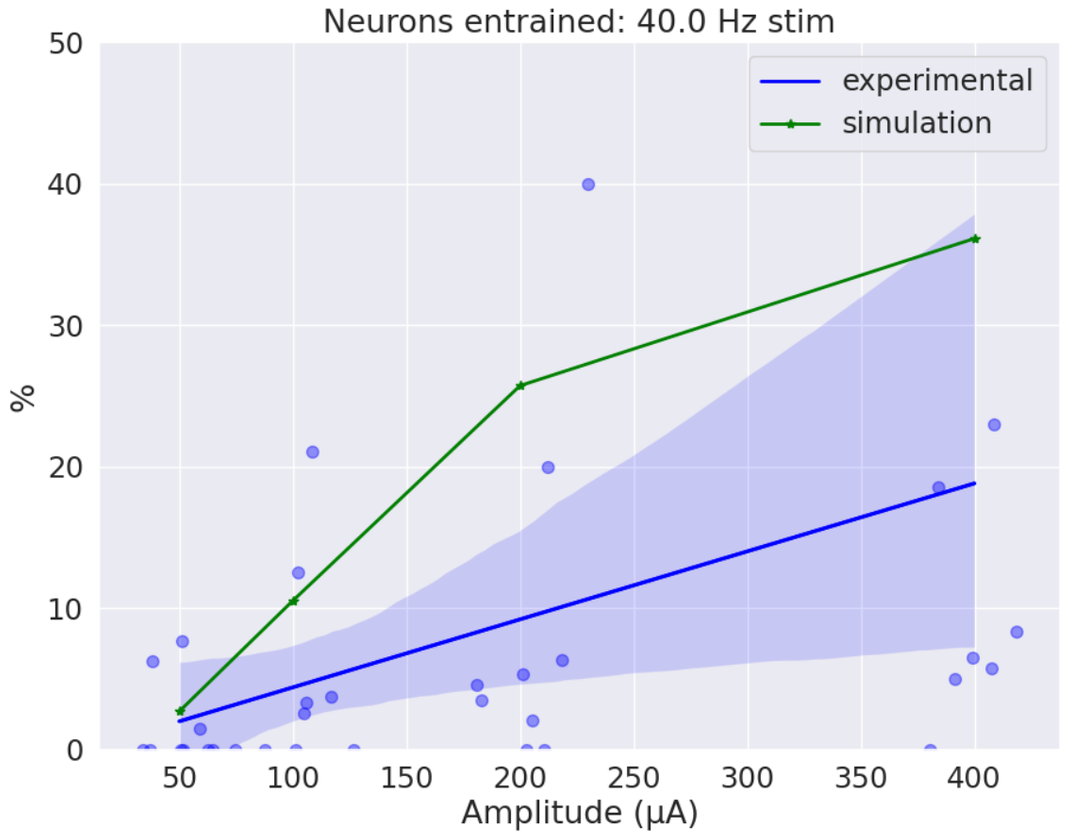


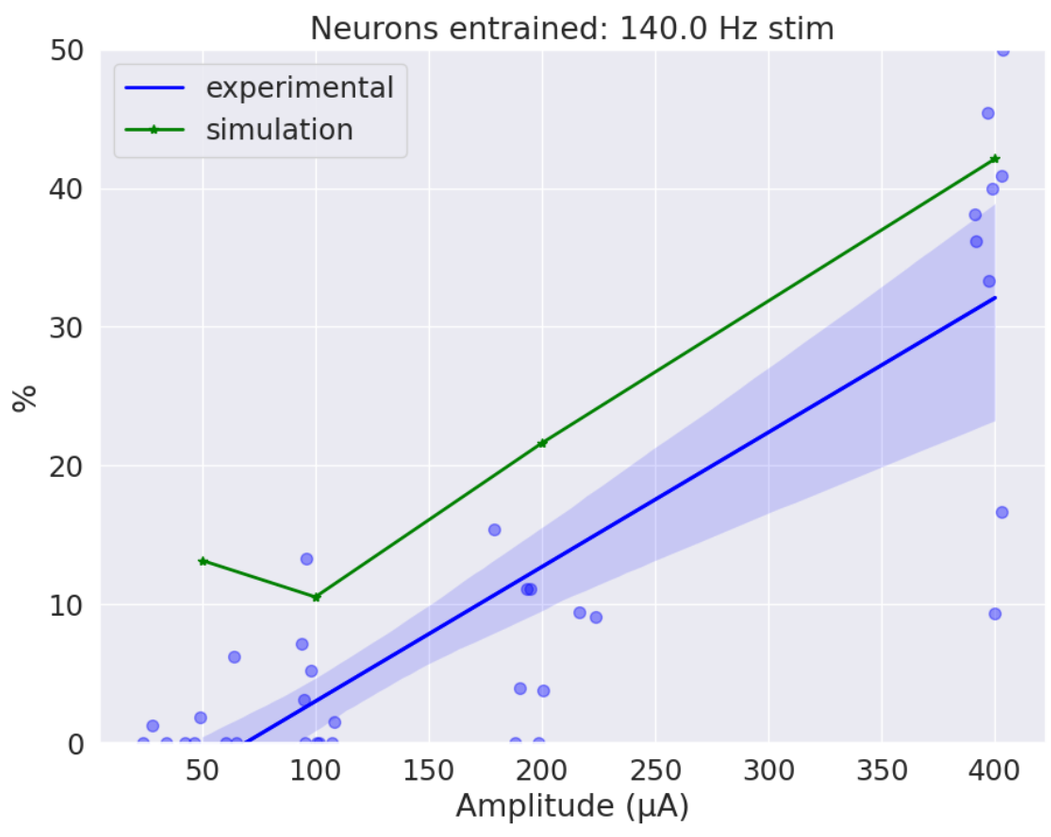
Regression plots:
Computed as the regression across rats for # of neurons entrained/# neurons detected
For degree of entrainment - one regression plot per rat (change across neurons per rat)
Simulation amplitudes were 1/10 of experimental (5, 10, 20, 40uA) but plotted as 50, 100, 200, 400uA

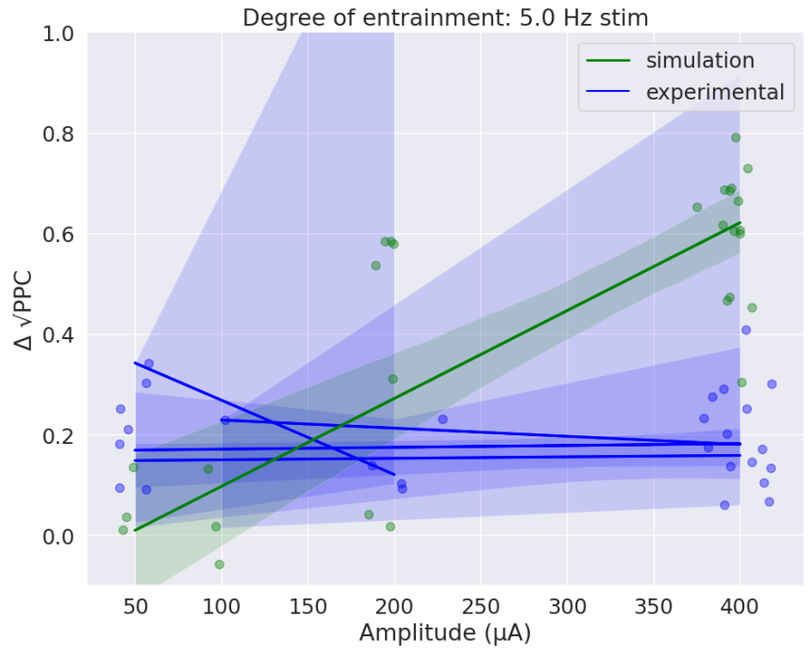

Neurons entrained: 5.0 Hz stim
experimental
simulation
%
Amplitude (μA)

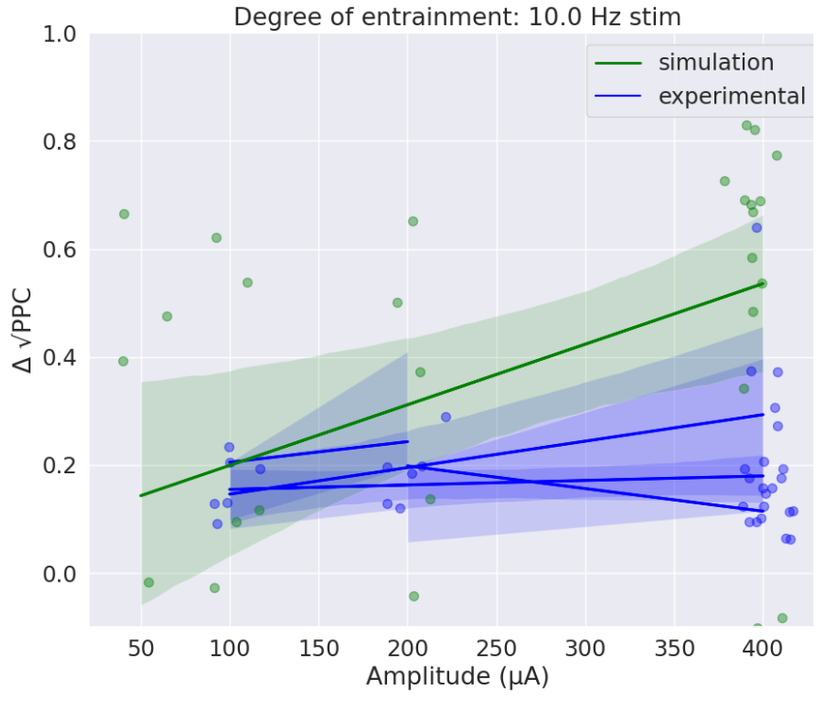

Neurons entrained: 10.0 Hz stim
experimental
simulation
%
Amplitude (μA)

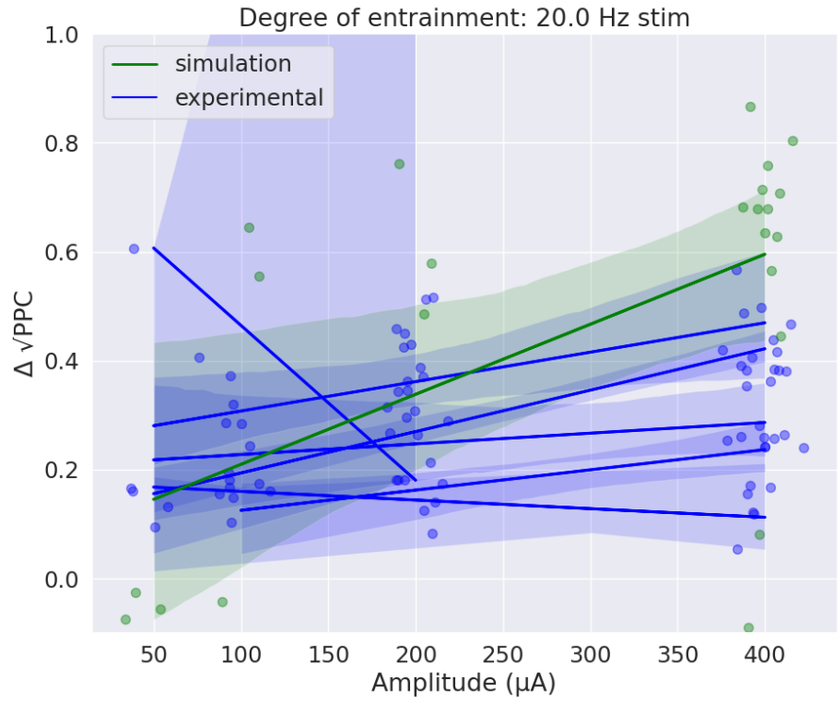

Neurons entrained: 20.0 Hz stim
experimental
simulation
%
Amplitude (μA)

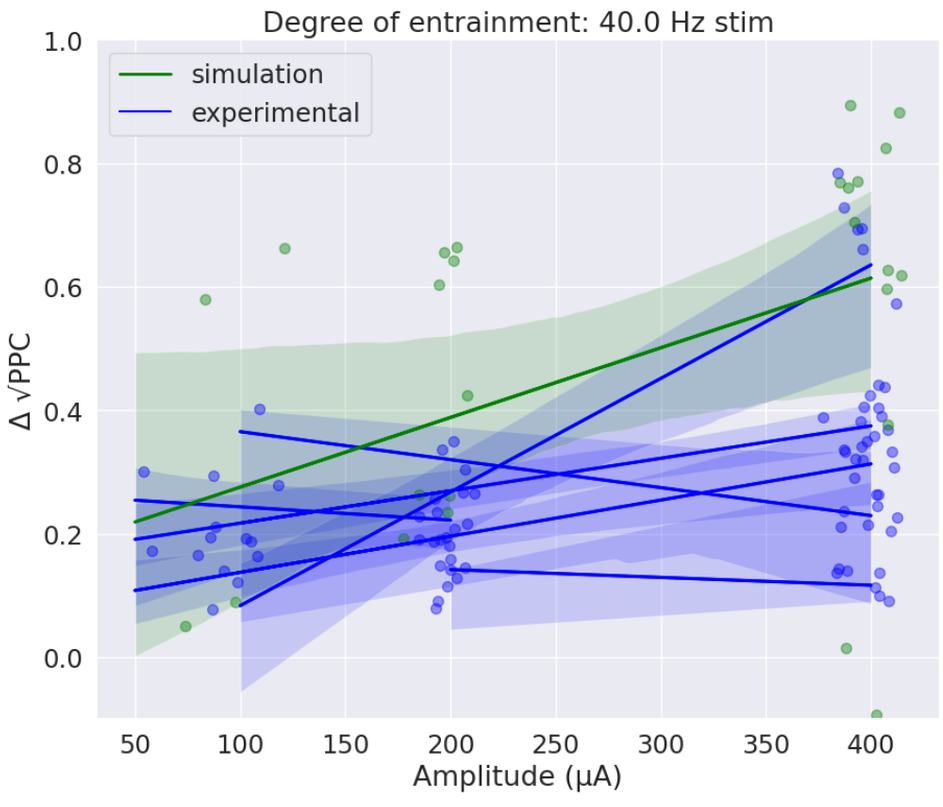

Neurons entrained: 40.0 Hz stim
experimental
simulation
%
Amplitude (μA)

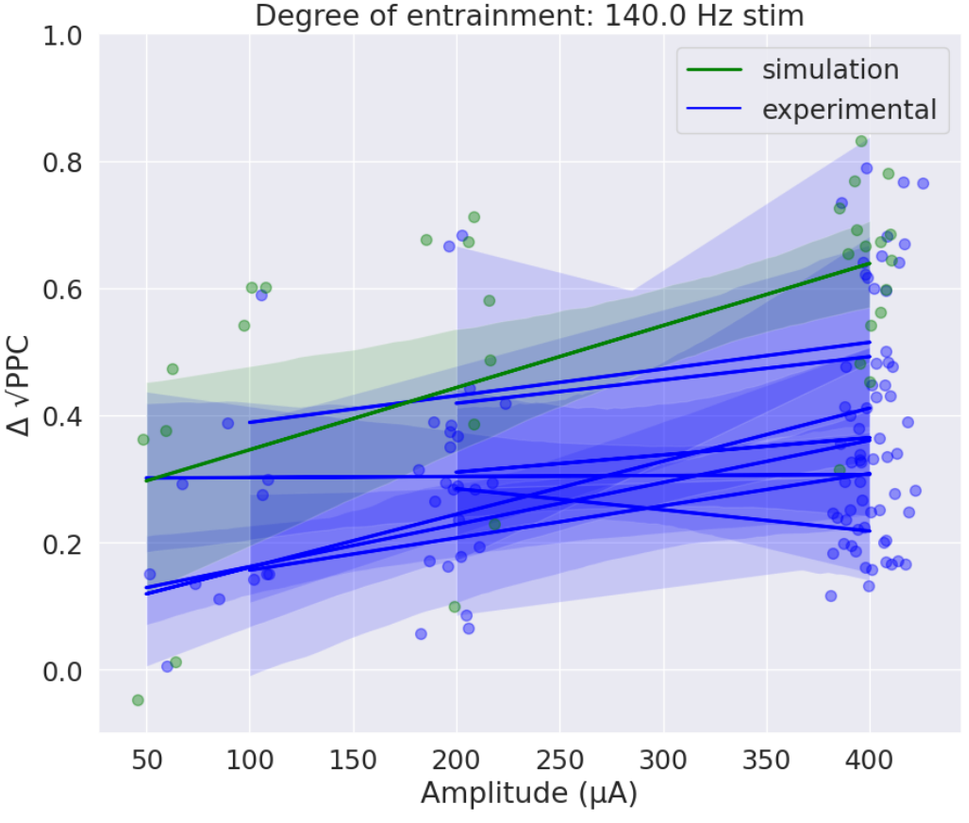

Neurons entrained: 140.0 Hz stim
experimental
simulation
%
Amplitude (μA)

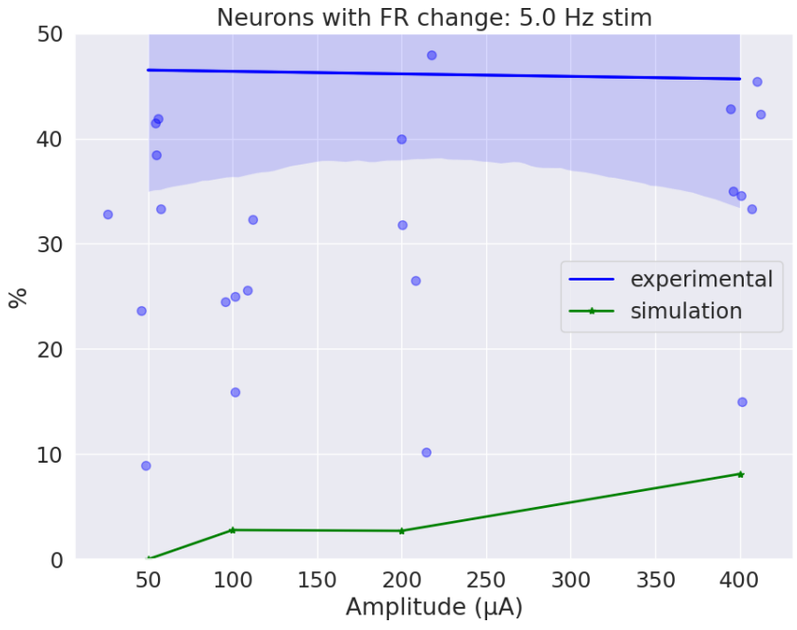

Degree of entrainment: 5.0 Hz stim
simulation
experimental
Δ √PPC
Amplitude (μA)

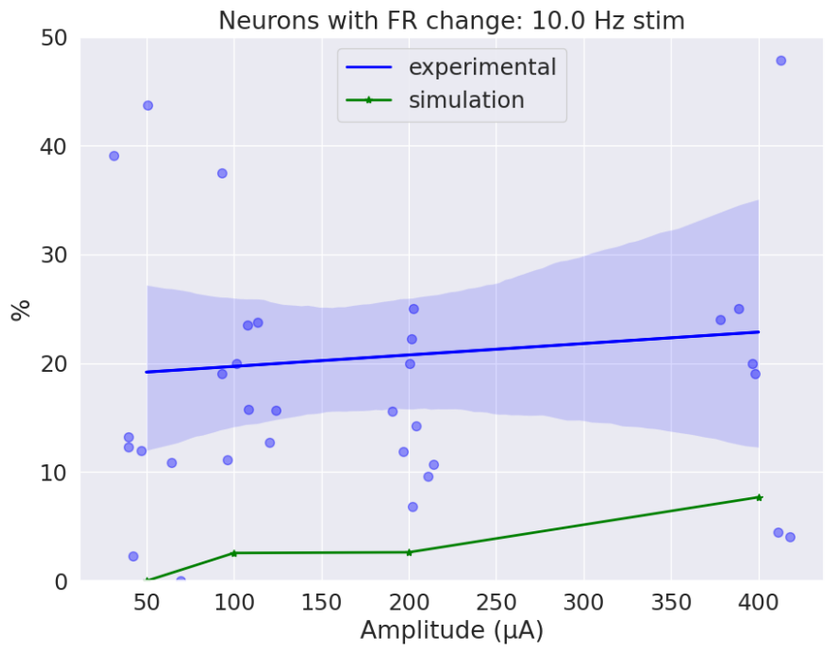

Degree of entrainment: 10.0 Hz stim
simulation
experimental
Δ √PPC
Amplitude (μA)

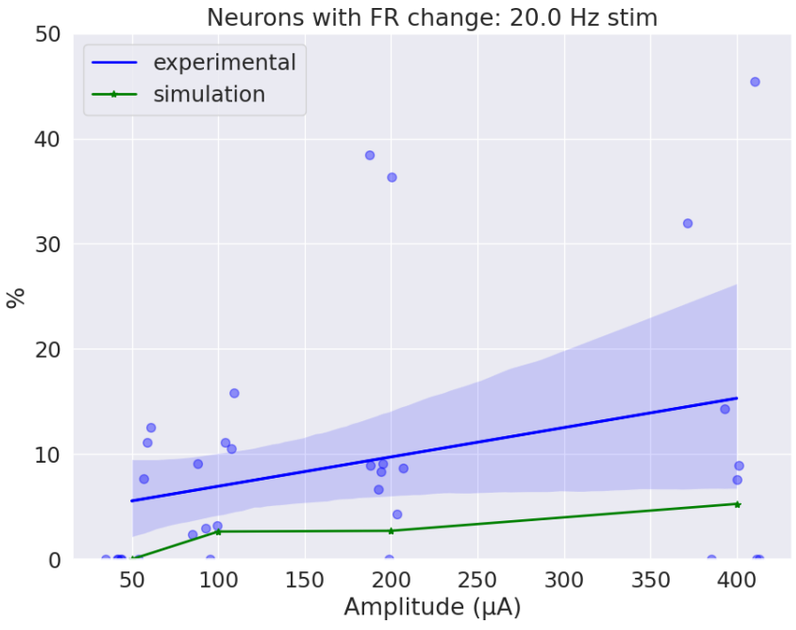

Degree of entrainment: 20.0 Hz stim
simulation
experimental
Δ √PPC
Amplitude (μA)

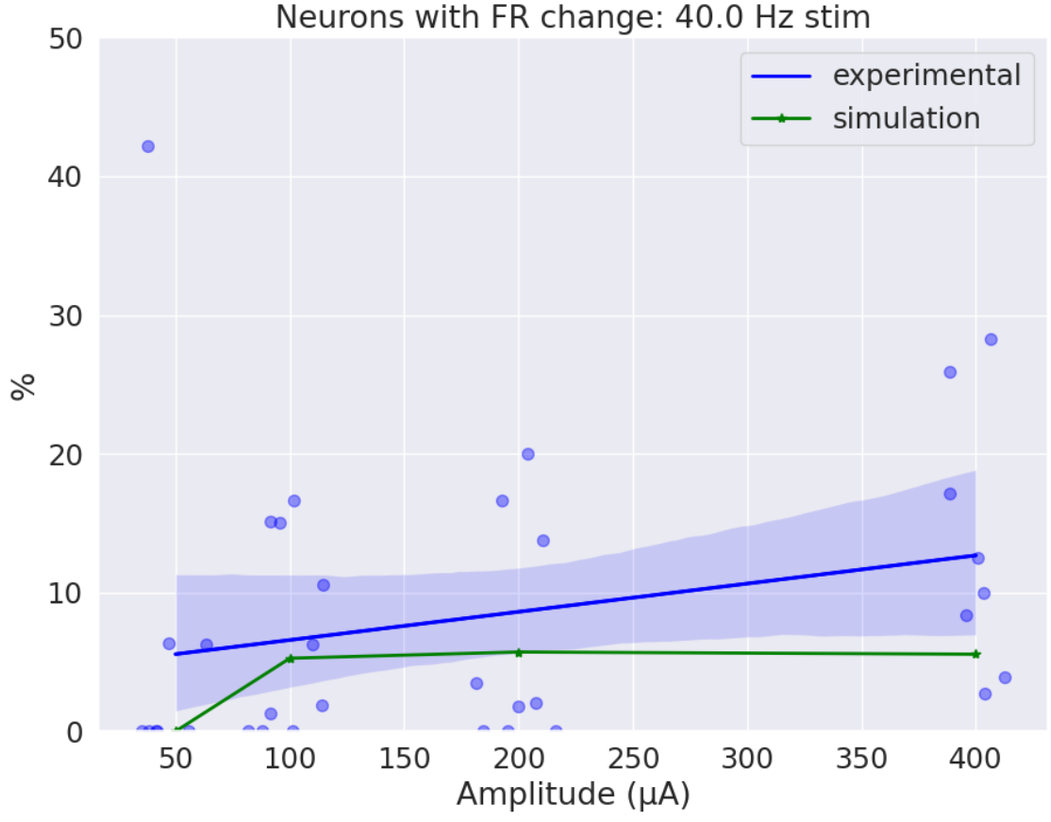

Degree of entrainment: 40.0 Hz stim
simulation
experimental
Δ √PPC
Amplitude (μA)

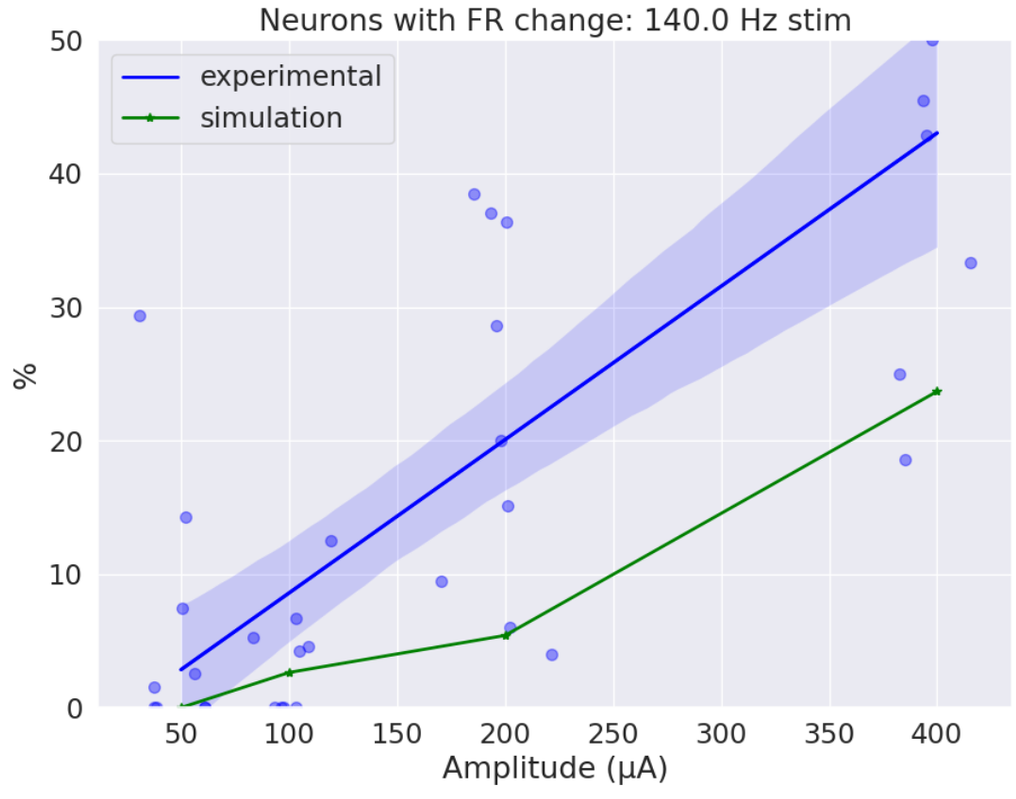

Degree of entrainment: 140.0 Hz stim
simulation
experimental
Δ √PPC
Amplitude (μA)

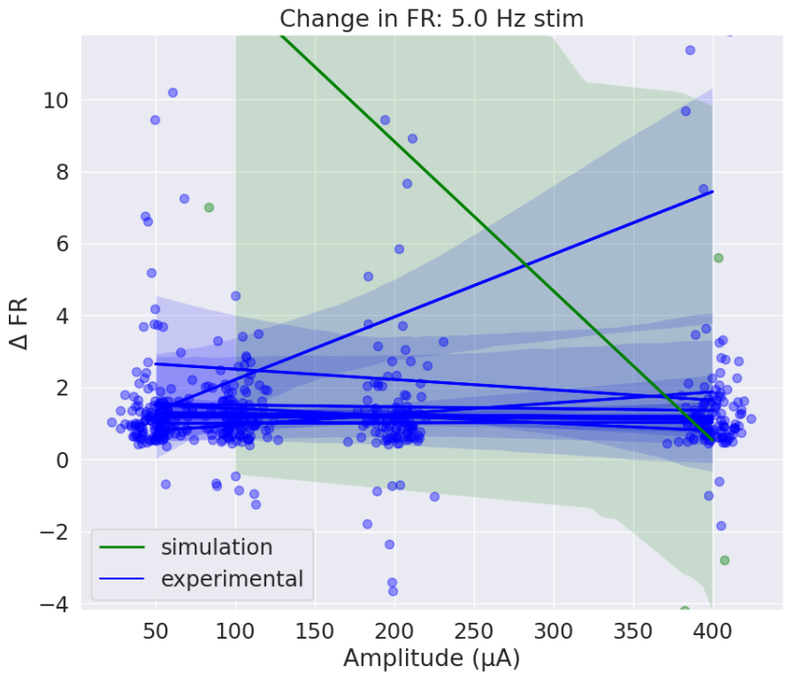

Neurons with FR change: 5.0 Hz stim
experimental
simulation
%
Amplitude (μA)

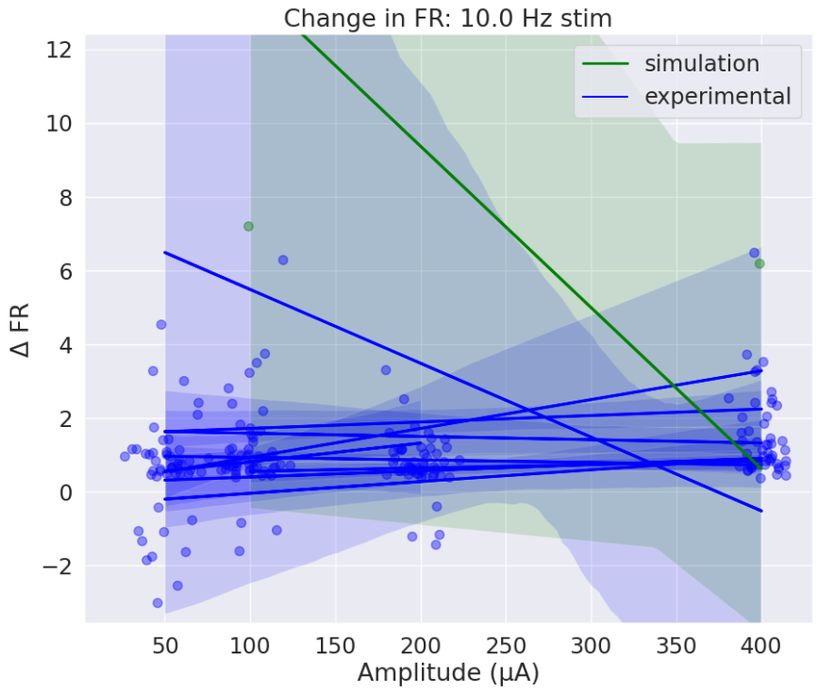

Neurons with FR change: 10.0 Hz stim
experimental
simulation
%
Amplitude (μA)

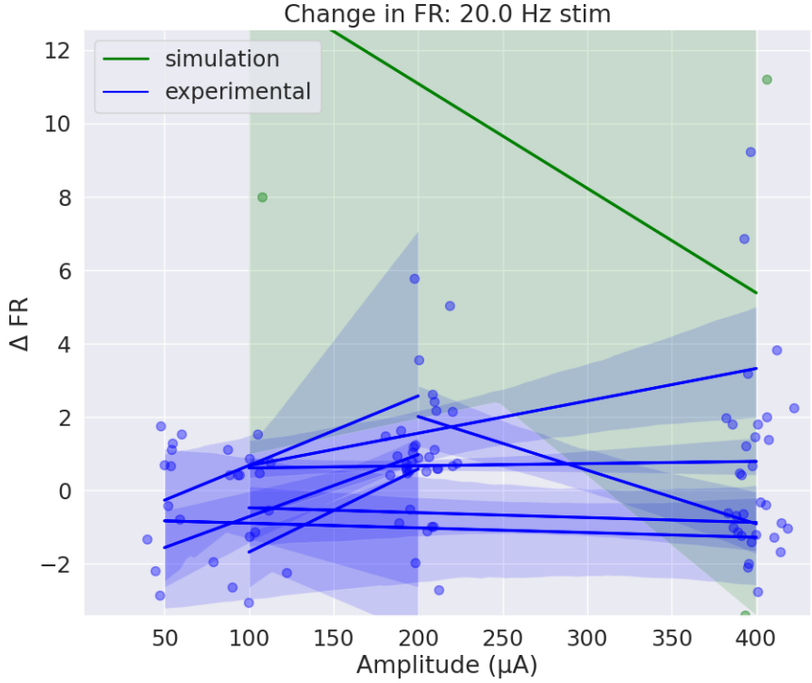

Neurons with FR change: 20.0 Hz stim
experimental
simulation
%
Amplitude (μA)

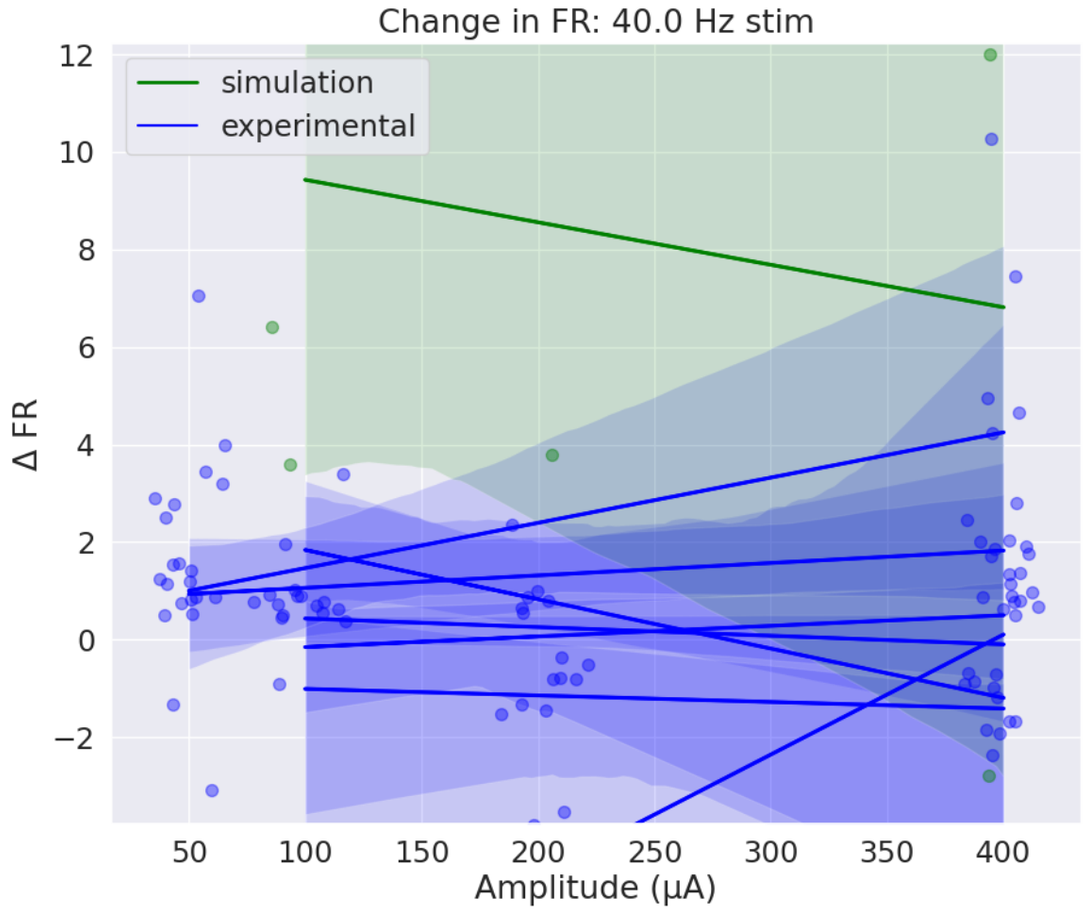

Neurons with FR change: 40.0 Hz stim
experimental
simulation
%
Amplitude (μA)

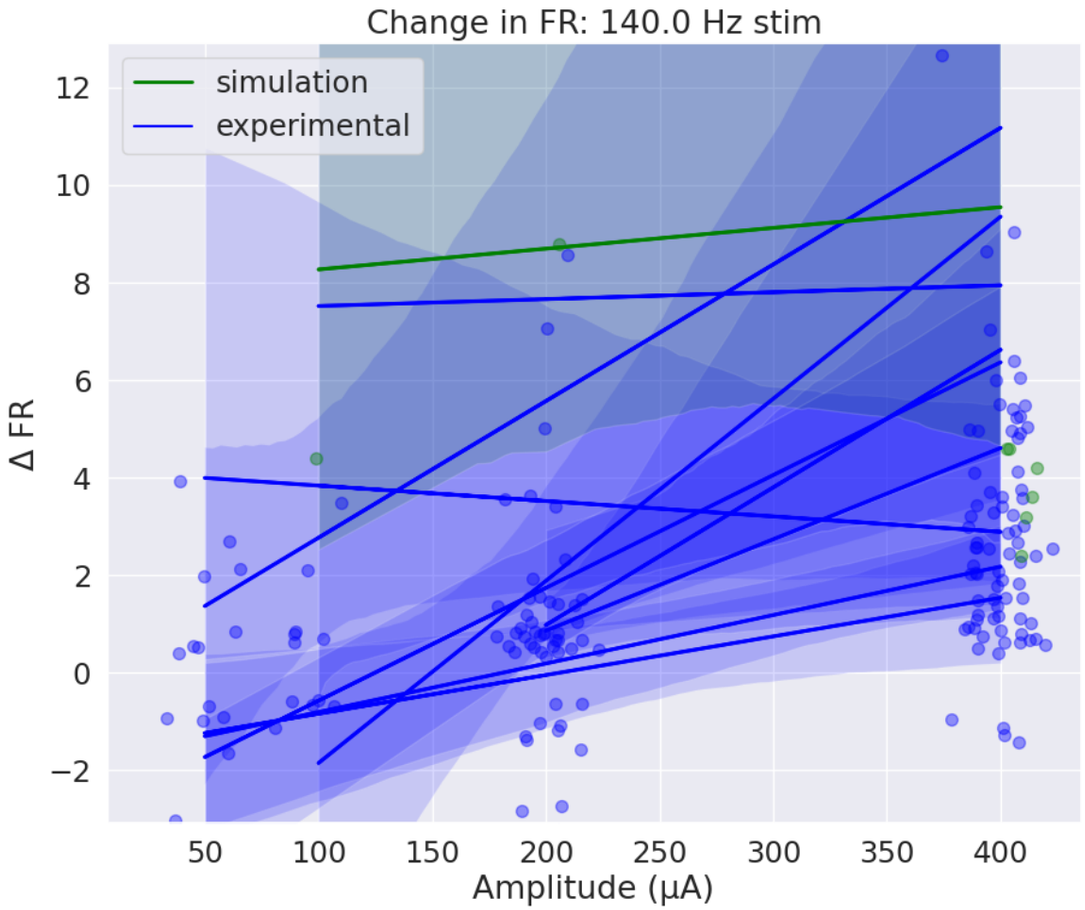

Neurons with FR change: 140.0 Hz stim
experimental
simulation
%
Amplitude (μA)


Change in FR: 5.0 Hz stim
simulation
experimental
Δ FR
Amplitude (μA)


Change in FR: 10.0 Hz stim
simulation
experimental
Δ FR
Amplitude (μA)


Change in FR: 20.0 Hz stim
simulation
experimental
Δ FR
Amplitude (μA)


Change in FR: 40.0 Hz stim
simulation
experimental
Δ FR
Amplitude (μA)


Change in FR: 140.0 Hz stim
simulation
experimental
Δ FR
Amplitude (μA)