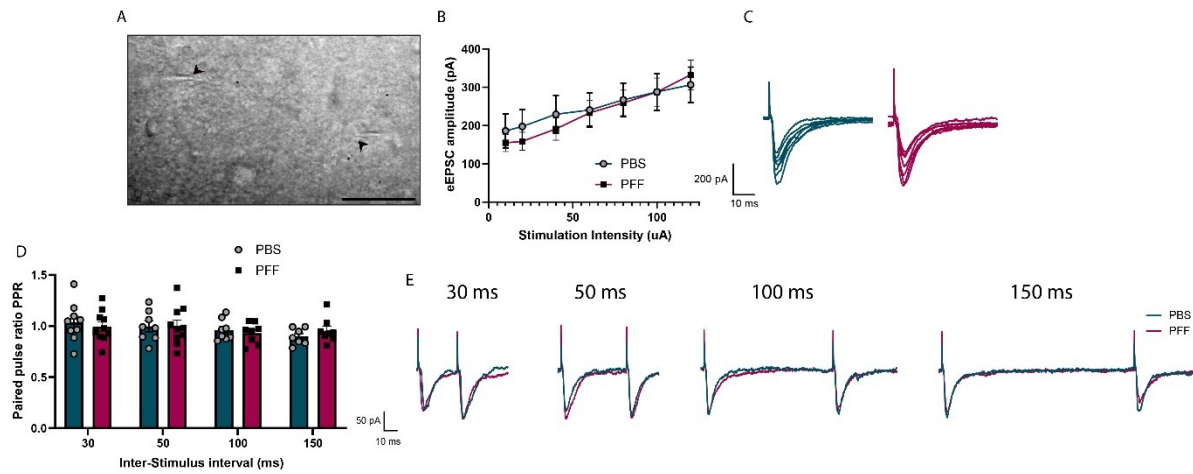
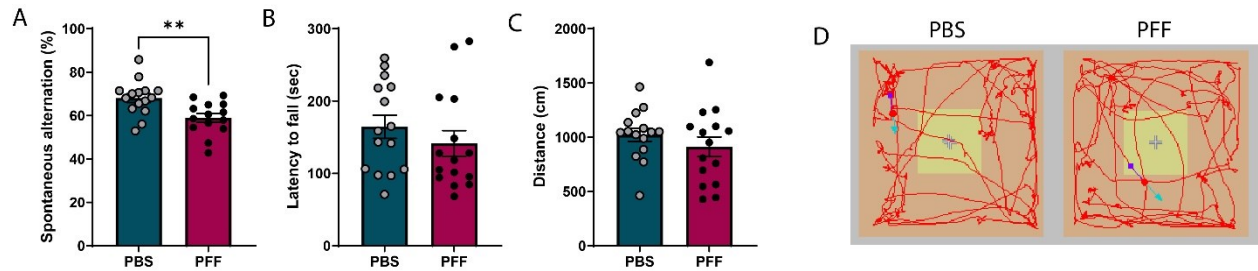


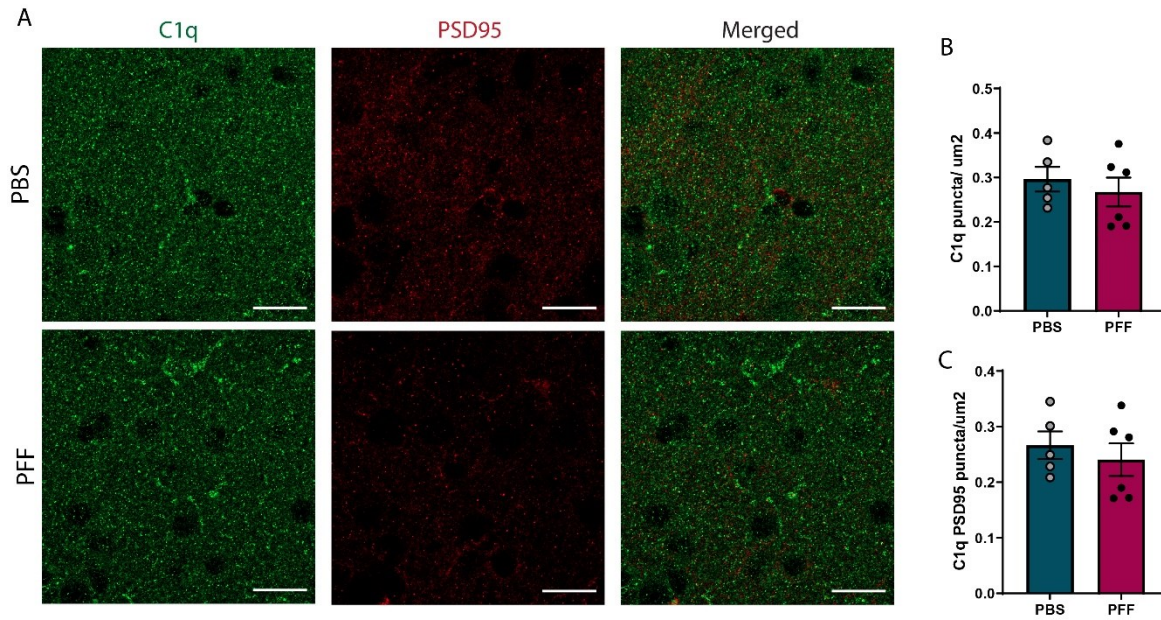


Supplementary figure 1. eEPSC and PPR in layer 5 neurons show no alterations.

A) Representative image of stimulation (left) and recording electrode (right). Scale bar 50 μ m. B) Evoked EPSC amplitudes from PBS and PFFs injected mice. 10, 20, 40, 60, 80, 100, 120 μ A (PBS= 186.22 ± 44.25 , 197.67 ± 45.06 , 229.44 ± 49.86 , 240.56 ± 44.84 , 267.03 ± 43.82 , 287.94 ± 48.51 , 306.59 ± 46.45 pA) (PFF = 154.91 ± 22.70 , 158.91 ± 23.60 , 191.32 ± 29.34 , 233.15 ± 33.24 , 259.25 ± 33.44 , 287.40 ± 36.87 , 332.59 ± 38.82 pA) C) Traces of eEPSC D) Paired pulse ratios from PBS and PFF mice. 30 ms, 50 ms, 100 ms, 150 ms.(PBS = 1.04 ± 0.06 , 0.99 ± 0.05 , 0.96 ± 0.04 , 0.90 ± 0.03 ratio)(PFF= 0.99 ± 0.05 , 1.00 ± 0.06 , 0.93 ± 0.04 , 0.96 ± 0.04) E) Traces of paired pulses after stimulation in layer 5. Data in B, D are expressed as means $\pm$ S.E.M. B-C (PBS, n=8-9; PFF n=10-12 neurons from 3 mice). Data in D (PBS, n=5; PFF n=5). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; (B,D) Student's t-test.



Supplementary figure 2. Behavioral alterations 20 weeks after PFF injection. A) Y maze spontaneous alteration percentage B) Latency to fall in the rotarod test. C) Open field distance (cm). D) Diagram of open field movement trace. Data in A-C are expressed as means $\pm$ S.E.M. A-C (PBS, n=15; PFF n=14 mice). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Student's t-test



Supplementary figure 3. C1q levels in layer 5 of the somatosensory cortex. A) Representative immunofluorescence images against C1q (green) and PSD95 (red) B) Quantification of C1q puncta in layer 5. C) Quantification of C1q co-localization with postsynaptic terminals. Data in B-C are expressed as means $\pm$ S.E.M. (PBS, n=5; PFF n=6 mice). * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; Student's t-test