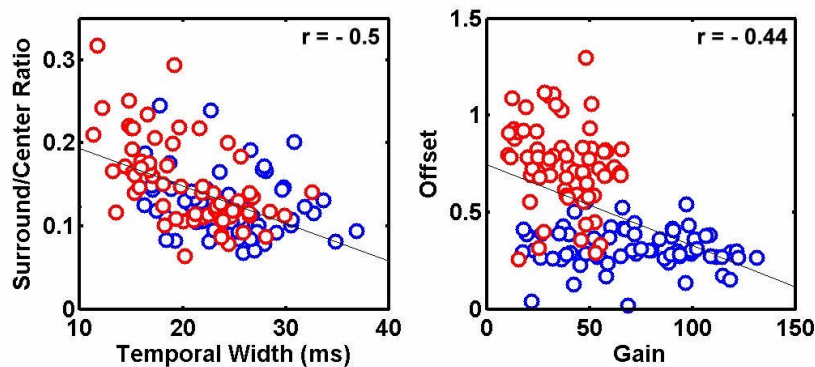


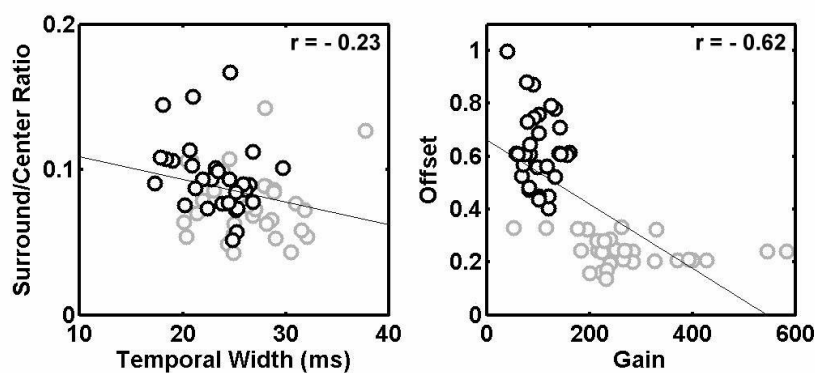
**A**

**Adaptation to contrast (NS)**



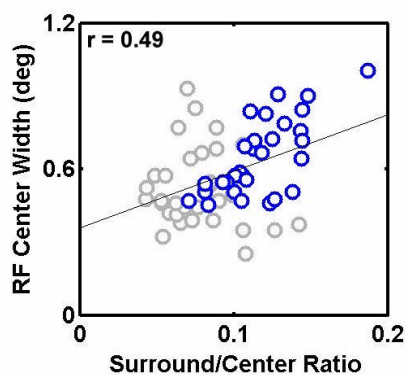
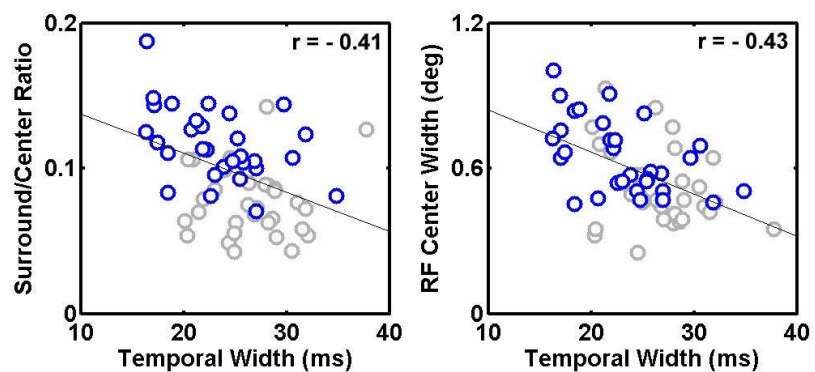
**B**

**Adaptation to contrast (WN)**



**C**

**Adaptation to correlations**



Supplementary Figure 1: Contrast- and correlation-induced changes in receptive fields and nonlinearities are correlated. To yield a coherent picture of the effects of changes in stimulus contrast and correlations on the functional properties of LGN neurons, we examined the relationship between different properties of RFs and NLs across stimulus conditions. Supplementary figure 1 shows scatter plots for all the RF and NL properties for which we observed significant adaptation. Strong correlations between the properties of RFs and NLs are evident both within and across stimulus conditions. For each pair of properties, the correlation coefficient for values combined across stimulus conditions is given (i.e., the correlation coefficient for all of the points on the plot). All correlation coefficients had  $p < 0.001$ , except for that between surround/center ratio and temporal width for contrast adaptation during WN stimulation, which has  $p = 0.06$ .