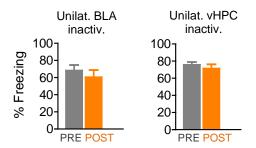
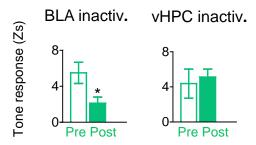
## SUPPLEMENTAL MATERIAL

## Gating of fear in prelimbic cortex by hippocampal and amygdala inputs

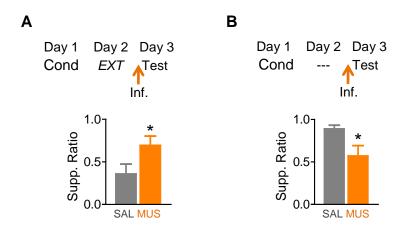
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**Figure S1.** Freezing before (grey) and after (orange) BLA (left) and vHPC (right) inactivations. Unilateral inactivation of either BLA or vHPC did not significantly affect time spent freezing during the tone ( $t_{11}$ =1.503; P=0.16;  $t_{16}$ =0.81; P=0.43 (paired) respectively). Error bars illustrate s.e.m.



**Figure S2.** Inactivation of BLA, but not vHPC, decreased tone responses of PL interneurons. These results suggest that decreased PL tone responses were due in part to decreased interneuron activity. Data represent averaged PL tone response in the first 3 s bin after tone onset previous to (empty bar) and following (filled bar) inactivations. Error bars illustrate s.e.m. \*P<0.05.



**Figure S3.** Inactivation of vHPC has opposite effects on suppression of bar pressing during the tone, depending on whether or not extinction occurred.

- (A) Infusion of muscimol (MUS) into vHPC of extinguished rats during a tone test on Day 3 increased suppression ratio (increased fear) compared to saline-infused rats (SAL).
- (B) In contrast, MUS infusion into vHPC of rats that did not receive extinction (No-ext group) decreased suppression ratio (decreased fear). Error bars illustrate s.e.m. \*P<0.05.