Mouse study finds that fearlessness can be learned

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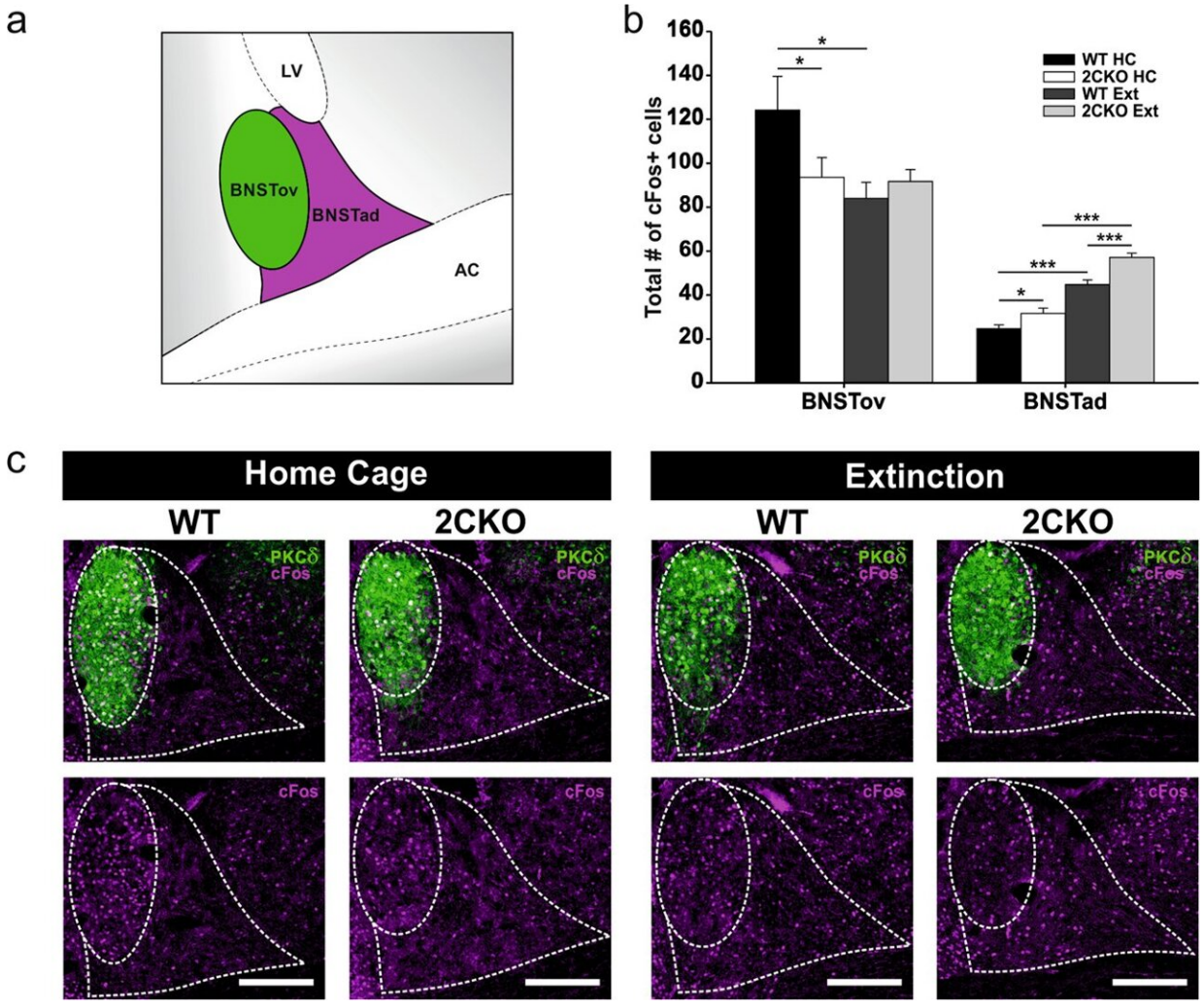

Altered neuronal activity in the dorsal BNST supports faster fear extinction in 2CKO mice. a Schematic illustration of the dorsal BNST subregions analyzed. BNSTov bed nucleus of the stria terminalis, oval nucleus; BNSTad bed nucleus of the stria terminalis, anteriodorsal part; LV lateral ventricle; AC anterior

commissure. b cFos quantification in the BNSTov and BNSTad. In the BNSTov, 2CKO mice showed reduced cFos levels under home cage conditions and extinction treatment reduced cFos in WT mice: Two-way ANOVA (treatment): $F_{(1,19)} = 4.973$, $P = 0.038$; pairwise Holm–Sidak test: WT HC vs. 2CKO HC: $P = 0.036$, WT HC vs. WT Ext: $P = 0.011$. In the BNSTad, 2CKO mice showed increased cFos levels under home cage and extinction conditions and extinction treatment increased cFos in both genotypes: Two-way ANOVA (genotype): $F_{(1,19)} = 20.736$, $P \leq 0.001$; Two-way ANOVA (treatment): $F_{(1,19)} = 114.923$, $P \leq 0.001$; pairwise Holm–Sidak test: WT HC vs. 2CKO HC: $P = 0.034$, WT Ext vs. 2CKO Ext: $P \leq 0.001$, WT HC vs. WT Ext: $P \leq 0.001$, KO HC vs. KO Ext: $P \leq 0.001$. HC: WT mice (n = 5), 2CKO mice (n = 6); Ext: WT mice (n = 5), 2CKO mice (n = 7). Data are shown as means ± SEM. *P