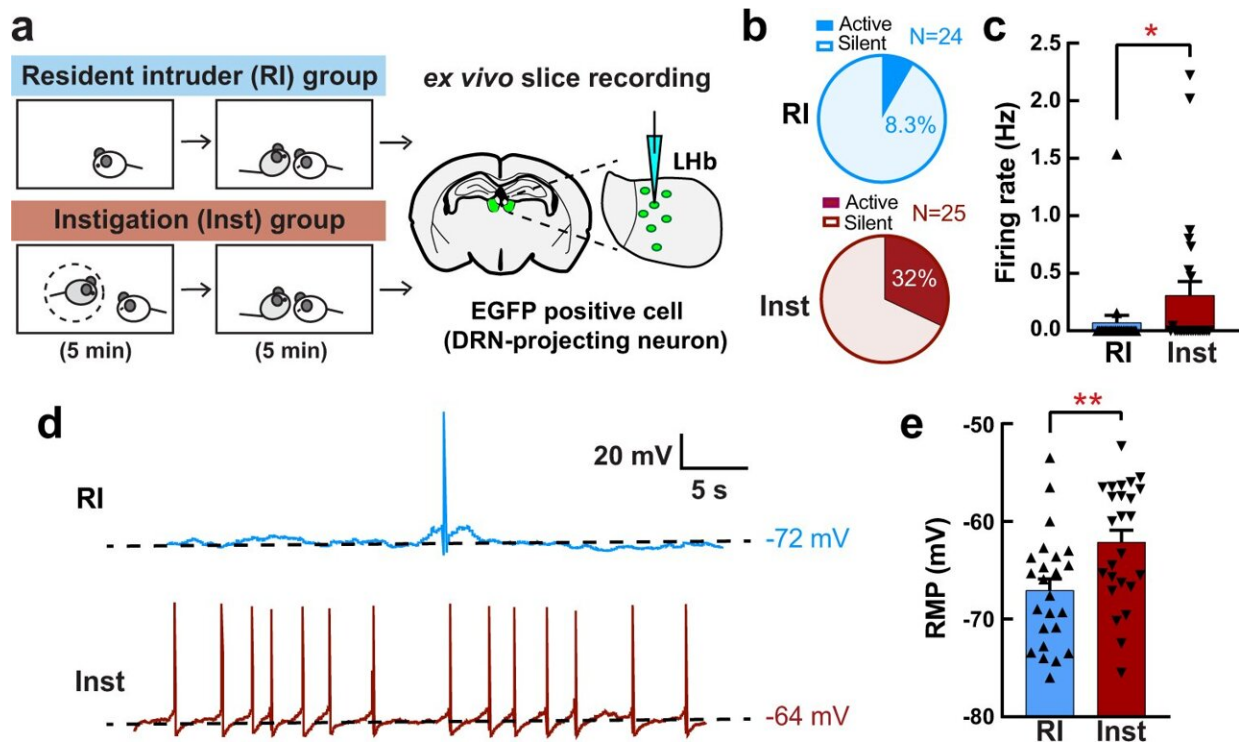


# Making sense of socially enhanced aggression in the brains of mice

July 22 2022



a Schematics of the experiment. Animals were injected a retrograde AAVretro-hSyn-EGFP into the DRN at least 4 weeks before the test. On the test day, RI group (n = 5 biologically independent animals) was tested for 5 min RI test, and Inst group (n = 5 biologically independent animals) had 5 min exposure to a caged-instigator male prior to 5 min aggression test. Recording was conducted from the EGFP+ cells in the LHB (3–6 neurons per mouse). b Percentage of the recorded neurons that showed spontaneous firing (Active) was higher in the Inst group (bottom: 8 Active cells out of 25 recorded cells) than the RI group (top: 2 Active cells out of 24 recorded cells) (Chi-square test,  $X^2(1,49) = 4.222$ ,  $p = 0.0399$ ). c Average firing rate was higher in the Inst group compared to RI group

(Mann-Whitney test (two-sided), RI n = 25, Inst n = 24 biologically independent cells,  $U = 228$ ,  $p = 0.0500$ ). d Representative traces of spontaneous firing pattern of the EGFP + LHb neurons of RI animal (top, blue line) and Inst animal (bottom, red line). Black dotted lines indicate the resting membrane potential (RMP) of that cell. e Average RMP (mV) was higher in the Inst group compared to the RI group (Unpaired t test with Welch's correction (two-sided), RI n = 25, Inst n = 24 biologically independent cells,  $t(46.98) = 2.906$ ,  $p = 0.0056$ ). \*p

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