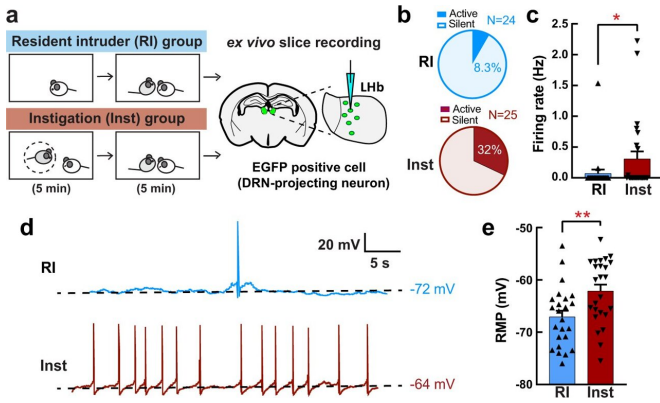


Making sense of socially enhanced aggression in the brains of mice

22 July 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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