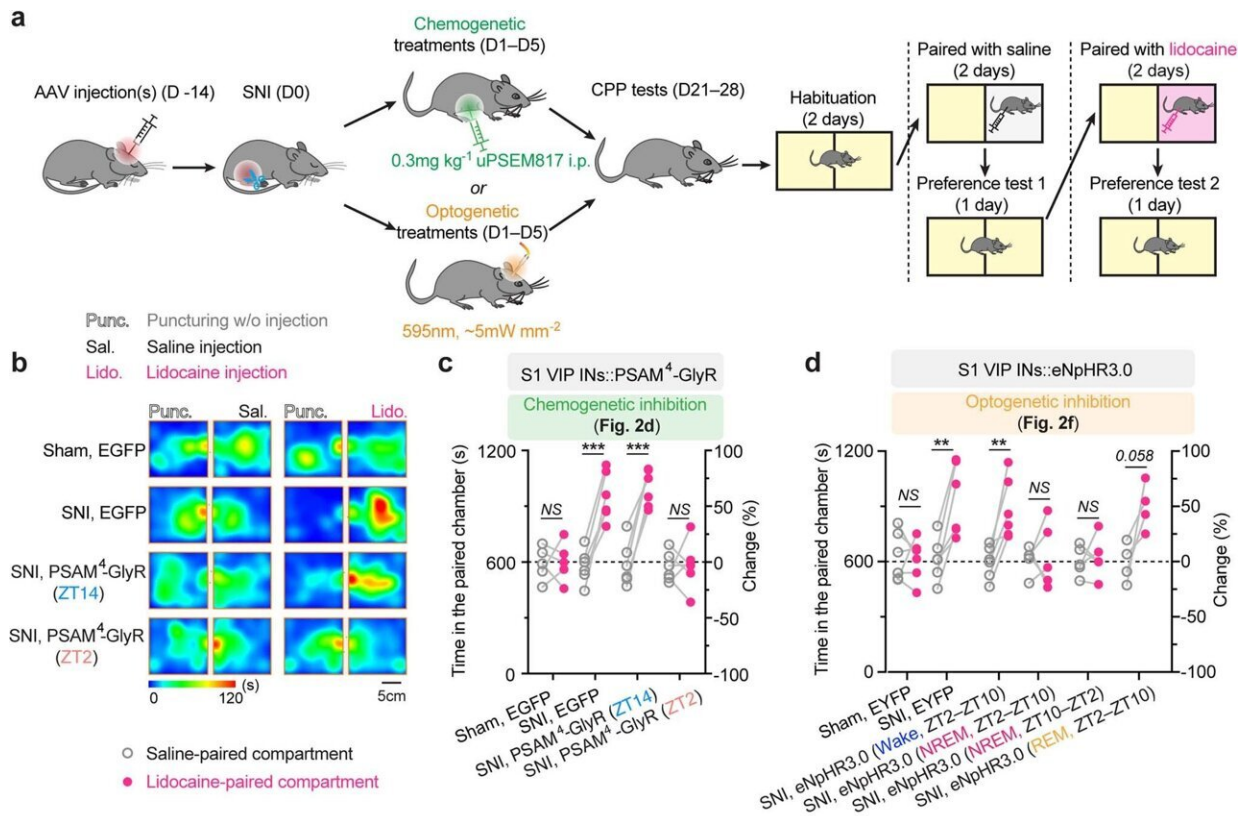


# Link found between chronic pain and overactive pyramidal neurons during sleep

February 9 2023, by Bob Yirka



Silencing S1 VIP INs during sleep prevents persistent ongoing pain after SNI. **a**, Schematic of experimental timeline and the conditioned place preference (CPP) test. Two weeks after viral infection, mice were subjected to SNI and daily inhibition of the target cells in the sleep or wake phase for 5 days. CPP tests were performed 2–3 weeks after the last inhibition session. **b**, Representative heat maps showing time spent in CPP chambers. **c**, Time spent in the saline- and lidocaine-paired chambers for individual mice ( $n = 5, 5, 5, 6$  mice; saline vs. lidocaine,  $P = 0.87, 0.0004, 0.0001, 0.90$ ; related to Fig. 2d). **d**, Time spent in

the saline- and lidocaine-paired chambers for individual mice (n = 6, 6, 6, 5, 5, 4 mice; saline vs. lidocaine, P = 0.81, 0.0035, 0.0063, 0.18, 0.74, 0.058; related to Fig. 2f). e, Time spent in the saline- and lidocaine-paired chambers for individual mice (n = 5 mice per group, saline vs. lidocaine, P = 0.91, 0.0022, 0.019, 0.66; related to Fig. 5e). f, Time spent in the saline- and lidocaine-paired chambers for individual mice (n = 4, 5, 4, 5 mice; saline vs. lidocaine, P = 0.36, 0.012, 0.011, 0.12; related to Fig. 6e). g, Time spent in the saline- and lidocaine-paired chambers for individual mice (n = 6 mice per group; saline vs. lidocaine, P = 0.11, 0.0010, 0.97, 0.49; related to Fig. 7b). Inset, experimental timeline. Mean  $\pm$  s.e.m. \*P

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