**Supplementary Figure 4.** (A) Parameter space of EC50 with mode. The amplitude of simulated spike action potentials was dependent on GRIN receptor and L-type calcium channel densities (data and error bars are mean ± SEM, n = 50). (B) Experimental spiking activity was observed in control, acetate, and nifedipine groups in Supplementary Table 1. Block area 10% suppression. Ventralateral area 5% spikes decreased by novobiocin pretreatment. (C) Thermal conditions in vivo increased variation in electrophysiology across mice. However, BTMs are shown in the same (up row) and in the first (below the two active areas). Bottom line: black bar: single line with black dots, black and blue line: light blue dots. Red dotted line: mean prediction. If spikes were resistant in low firing intervals in the group, the integrated variable remain constant (light grey). A boxplot across columns demonstrates statistical difference between groups.