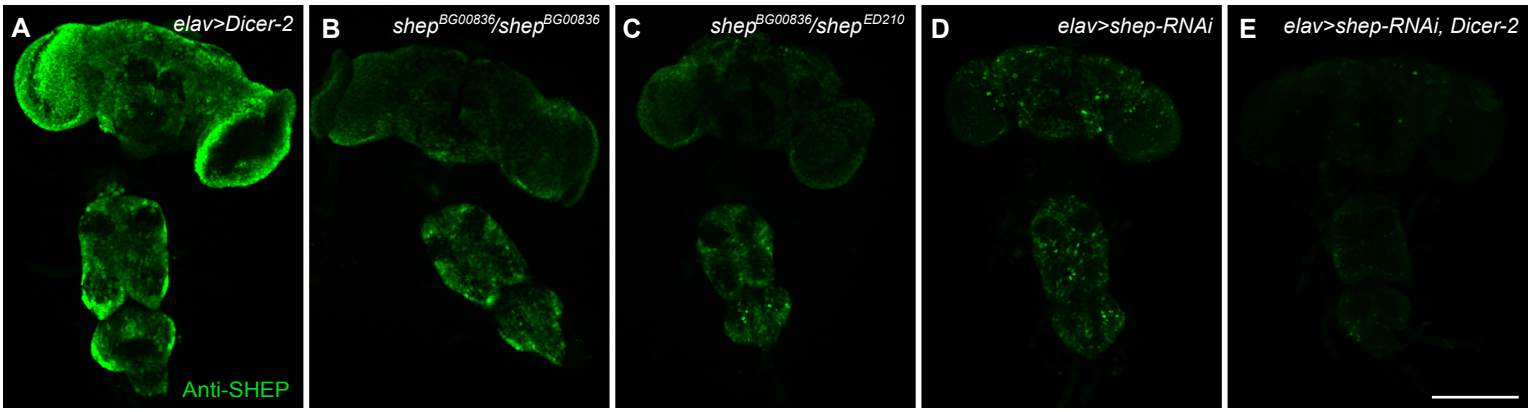

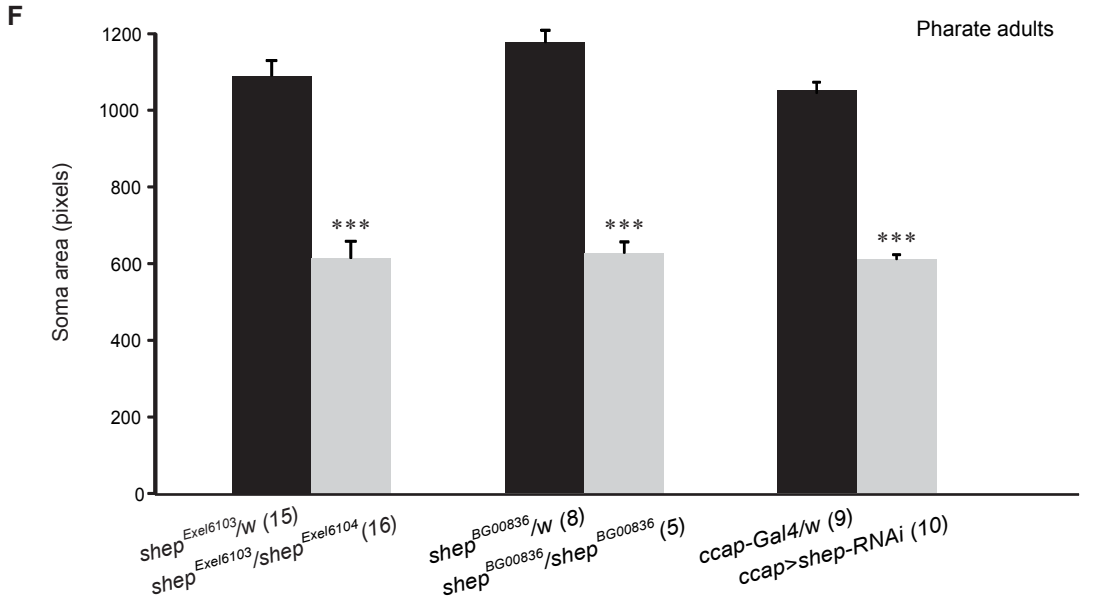

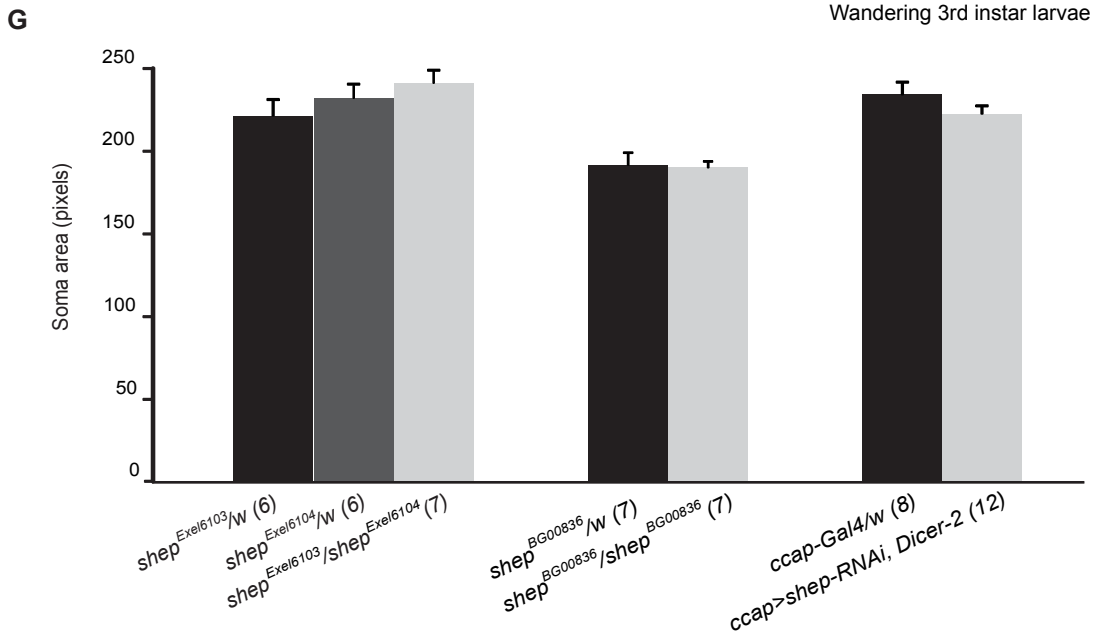

Figure S10 Loss of SHEP resulted in smaller bursicon neurons in P14 stage pharate adults but not in wandering 3rd instar larvae. (A-E) Anti-SHEP immunostaining of *shep* loss-of-function mutants at the P14 pharate adult stage. Lower SHEP levels were observed in all of the *shep* mutant backgrounds, but *elav>shep-RNAi, Dicer-2* displayed the greatest reduction of SHEP levels in the CNS. (F) In P14 stage pharate adults, we observed reduced bursicon neuron soma areas in hypomorphic *shep* mutant backgrounds, which included $shep^{Exel6103}/shep^{Exel6104}$, $shep^{BG00836}$ homozygotes, and *ccap>shep-RNAi*. (G) Bursicon neuron soma areas were unaffected in wandering 3rd larval instar *shep* mutants. The mutant backgrounds included *ccap>shep-RNAi, Dicer-2*, which was the strongest *shep* loss-of-function genotype, as judged by the impacts on branching in the peripheral axon arbor (Figure S11). The number of animals for each genotype is indicated in parentheses. **P*<0.05, ***P*<0.01, ****P*<0.001, Student's *t*-test. Scale bar: 200 μm.