

Supplemental Figure 1: Adrenal sensitivity was analyzed by calculating the slope (slope=[*Cort*]/(*log*[*ACTH*]) of the dose response curve for each animal based on Bill Engeland's work (*Engeland et al, Endocrinology 108:2149, 1981*). Dose response curves were determined by plotting the corticosterone concentration for each time point against the ACTH concentration for the respective time point. Regression analysis of the dose-response curves was done to determine the slope for each animal. The slopes were then averaged together by group and analyzed by 2-way ANOVA (stress x drug). There was no significant effects on adrenal sensitivity to ACTH by Stress or Drug.



Supplemental Figure 2: Repeated swim stress decreased the number of dendritic nodes and ends. The Neurolucida software program was used to draw and analyze the cell body and dendrites of recorded neurons that had been filled with biocytin during recording. The panel on the far right shows representative neurons from a control and a repeatedly swim stressed rat. There were significant decreases in the number of nodes (branch points) and the number of dendritic ends in those rats subjected to four days of swim stress (n=9) compared to controls (n=7). Two different morphological cell types were observed in the pPVT including pyramidal (shown in figure) and bipolar. These cell types were evenly distributed amongst the stressed and not stressed groups, and there was no difference in response to orexin between the two cell types.