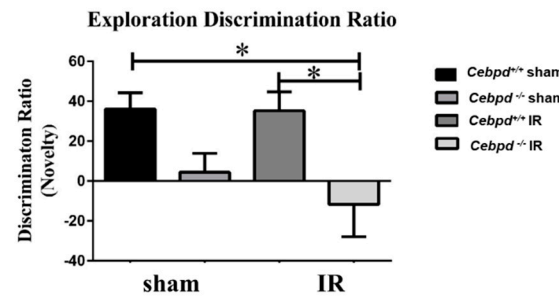
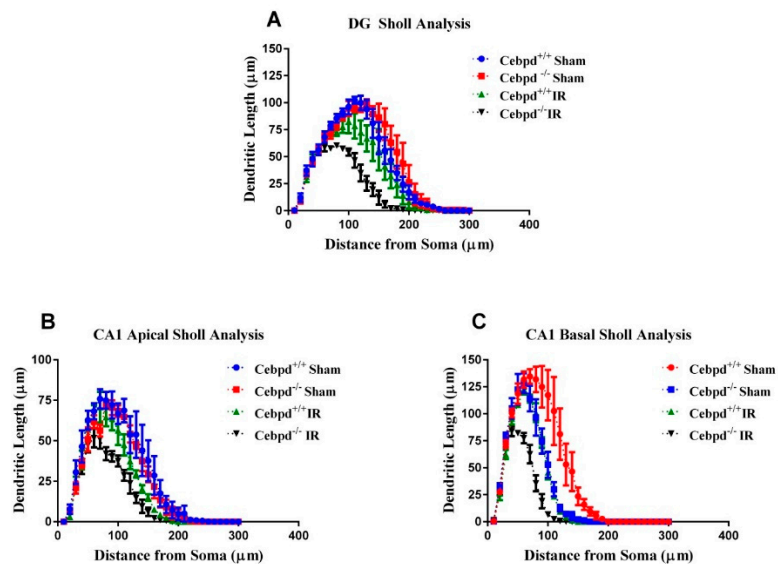


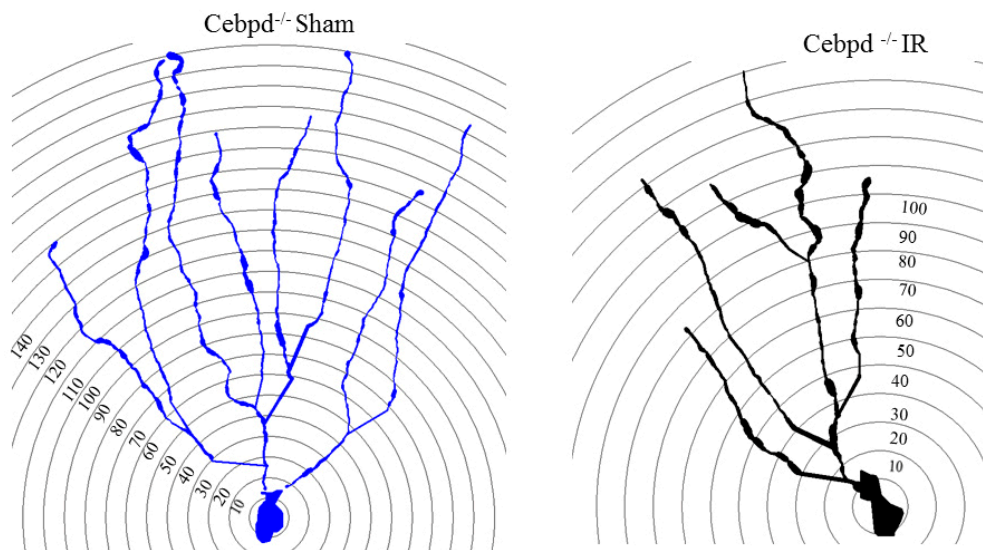
Supplementary Materials



Supplementary Figure 1. Discrimination ratio of sham and irradiated aged *Cebpd*^{+/+} and *Cebpd*^{-/-} mice. The DI shows reduced exploratory preference for the novel object over the familiar object in KO-IR resulting in negative discrimination ratio. *N*=5-7 mice/treatment. DI, discrimination index. Average \pm SEM; **p* < 0.05.



Supplementary Figure 2. Combined Sholl analyses of neurons in DG, CA1 apical and CA1 basal regions depicted in Figures 3, 4 and 5.



Supplementary Figure 3: Representative tracings of DG granule neurons superimposed over concentric rings (10 μ M) used for Sholl analysis.