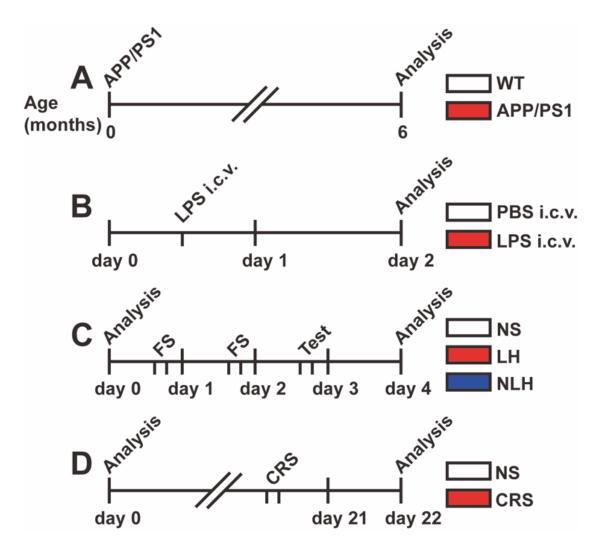
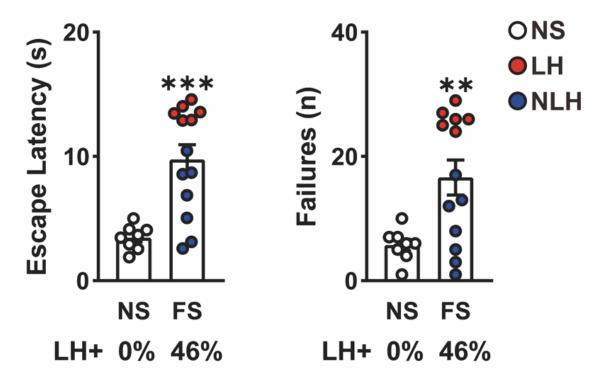
# Brain Resident Ly6C<sup>hi</sup> Monocytes Are Necessary for Maintaining Adult Hippocampal Neurogenesis

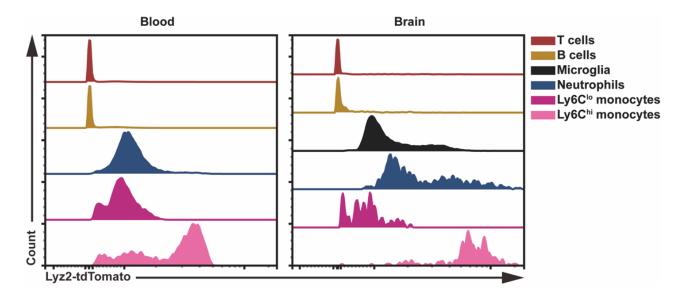
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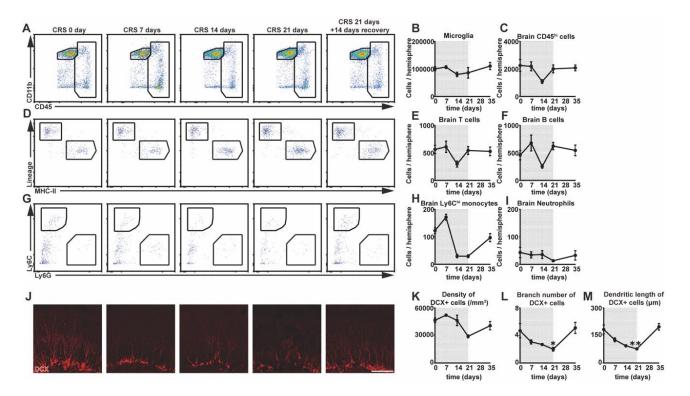
Supplementary Figure 1. Schematic overview of animal models used in Fig 1, related to Figure 1.



Supplementary Figure 2. Behavioral analysis of learned helplessness, related to Figure 1.



Supplementary Figure 3. tdTomato expression of blood and brain immune cells in Lyz2-tdTomato mice, related to Figure 3.



Supplementary Figure 4. The temporal dynamics of CRS stress effects brain immune cells distribution and neurogenesis. (A, D, G) Representative gating strategy of all major immune cell populations in the brain at each time point in CRS stress. Microglia are defined as CD45<sup>int</sup> CD11b<sup>+</sup>, Non-microglial immune cells are defined as CD45<sup>hi</sup>, T cells are defined as CD45<sup>hi</sup> CD11b<sup>-</sup> Lineage<sup>+</sup> MHC-II<sup>+</sup>, B cells are defined as CD45<sup>hi</sup> CD11b<sup>-</sup> Lineage<sup>+</sup> MHC-II<sup>+</sup>, neutrophils are defined as CD45<sup>hi</sup> CD11b<sup>+</sup> Lineage<sup>-</sup> Ly6G<sup>+</sup> Ly6C<sup>-</sup> and Ly6C<sup>hi</sup> monocytes are defined as CD45<sup>hi</sup> CD11b<sup>+</sup> Lineage<sup>-</sup> Ly6G<sup>-</sup> Ly6C<sup>hi</sup>. (B, C, E, F, H, I) Quantification of the absolute number of major immune cells in brain of mice at each time point in CRS stress. n = 4 mice at each time point. (J) Representative hippocampal coronal sections of the brains of mice at each time point in CRS stress were stained with DCX antibody. Scale bar = 100 µm. (K, L, M) Quantification of the density of DCX<sup>+</sup> newborn immature neuron (K), average dendritic branch number (L), and average dendritic branch length (M). n = 4 mice at each time point. For (B, C, E, F, H, I, K, L, M), data are represented as mean ± SEM. Statistical analysis was performed using Kruskal-Wallis test. \*p < 0.05, \*\*p < 0.01.