



## Intranasal 17β-Estradiol Modulates Spatial Learning and Memory in a Rat Model of Surgical Menopause

Alesia V. Prakapenka, Veronica L. Peña, Isabel Strouse, Steven Northup-Smith, Ally Schrier, Kinza Ahmed, Heather A. Bimonte-Nelson and Rachael W. Sirianni \*



**Figure S1.** Tritiated E2 distribution in striatum and basal forebrain 0.5, 2, and 6 h following intranasal administration as a function of cyclodextrin type [54].



**Figure S2.** Tritiated E2 distribution in ventral CA1/CA2 hippocampus, entorhinal cortex, and perirhinal cortex 0.5, 2, and 6 h following intranasal administration as a function of cyclodextrin type [54].



**Figure S3.** Performance on the MWM, visible platform task, and open field task. (**a**) Total distance traveled to platform across days on the MWM; (**b**) time to platform across trials on the visible platform task; (**c**) time spent in the center of the open field task; (**d**) Estrogen × Vehicle interaction for total distance traveled on the open field task. All data are represented as mean  $\pm$  s.e.m. \* *p* < 0.05.