



Supplementary Figure Legends

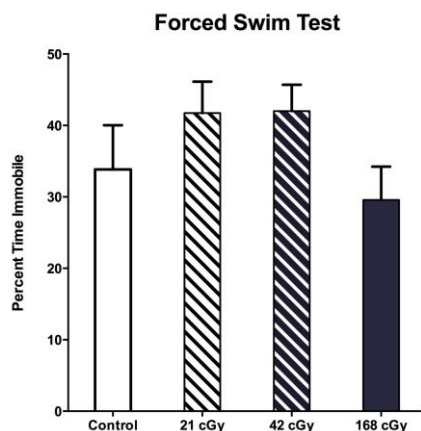


Figure S1. No significant effects of ^4He ion irradiation on the percent time spent immobile in the forced swim test. Control: $n = 13$ mice; 21 cGy: $n = 23$ mice; 42 cGy: $n = 20$ mice; 168 cGy: $n = 16$ mice.

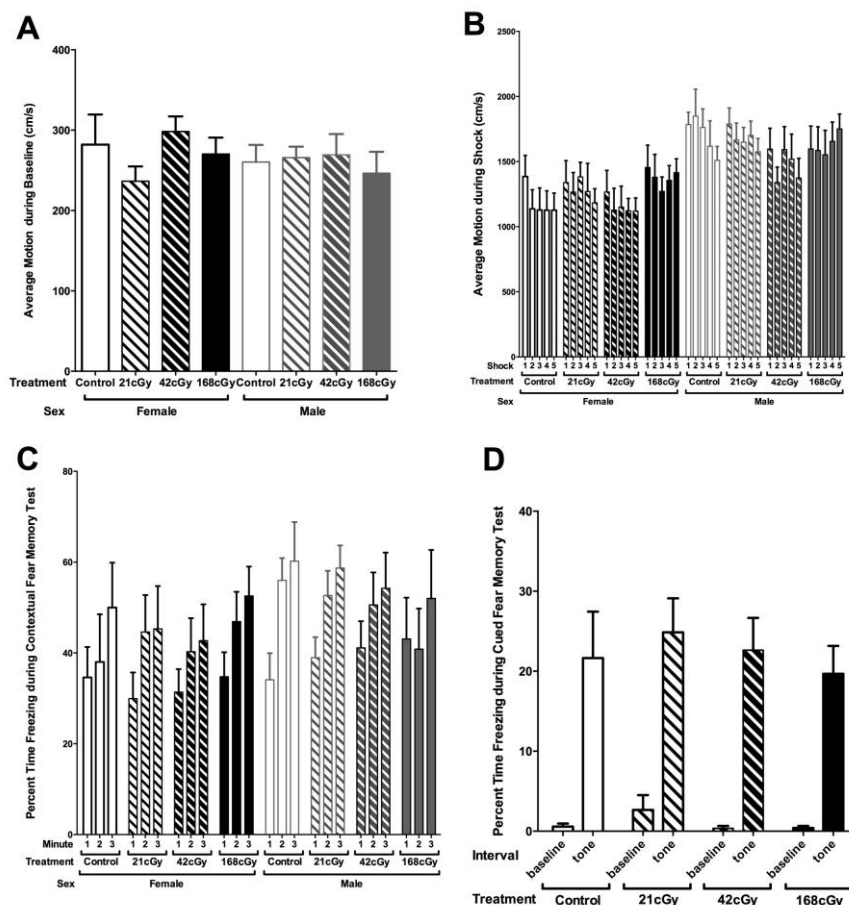


Figure S2. No significant effects of ^4He ion irradiation on contextual or cued fear learning or memory. **A.** No effects of Helium ion irradiation on activity levels prior to the first tone. **B.** No effect of Helium ion irradiation on response to the shock. There was an effect of sex on response to the shock ($F(1,64) = 19.489$, $p < 0.001$), with higher motion levels in males than females. **C.** No effects of He ion irradiation on contextual fear memory. **D.** No effects of Helium ion irradiation on cued fear memory. Control: $n = 13$ mice; 21 cGy: $n = 23$ mice; 42 cGy: $n = 20$ mice; 168 cGy: $n = 16$ mice.