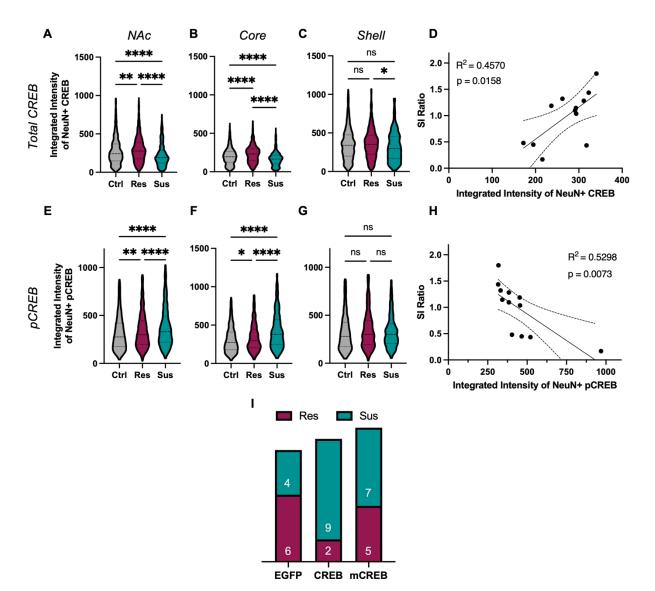
bioRxiv preprint doi: https://doi.org/10.1101/2024.01.15.575728; this version posted January 16, 2024. The copyright holder for this preprint (which was not certified by peer review) is the author/funder, who has granted bioRxiv a license to display the preprint in perpetuity. It is made available under aCC-BY-NC-ND 4.0 International license.



733

734 Supplemental Figure 1. Across the A) entire NAc, total CREB expression was decreased 735 in Sus neurons compared to Res and Ctrl neurons, and increased in Res neurons compared to between Ctrl ( $F_{(2,3275)}$  = 50.60, *P* < 0.0001; Tukey post-hoc \*\**p* = 0.0016; 736 \*\*\*\*p < 0.0001). Similar effects were observed in the B) core (F<sub>(2.1717)</sub> = 51.68, P < 0.0001; 737 738 Tukey post-hoc \*\*\*\*p < 0.001). C) In the shell, total CREB expression was only decreased 739 in Sus neurons compared to Res, with no significant different compared to Ctrl ( $F_{(2,1568)}$  = 740 4.271, P = 0.0141; Tukey post-hoc \*p = 0.012). D) Pearson r correlation of individual 741 animal's mean total neuronal CREB expression and Interaction Ratio (SI score) revealed 742 a strong positive correlation (r(12) = .676, p = 0.0158,  $R^2 = 0.4570$ ). E) In contrast, 743 increased expression of pCREB was observed in Sus and Res compared to Ctrl neurons  $(F_{(2,3762)} = 36.28, P < 0.0001;$  Tukey post-hoc \*\* p = 0.0013, \*\*\*\*p < 0.0001) in total NAc. 744

This increase in pCREB in Sus neurons was observed in F) NAc core ( $F_{(2,1951)} = 56.72$ , P 745 < 0.0001; Tukey post-hoc \*\*\*\*p < 0.001), but not in the G) shell (F<sub>(2.1833)</sub> = 2.782, P = 746 747 0.0622). H) Pearson r correlation of individual animal's mean neuronal pCREB expression 748 and Interaction Ratio (SI score) revealed a negative correlation (r(12) = -0.728, p =0.0073,  $R^2 = 0.5298$ ). I) Phenotype assignment for defeated animals following viral-749 750 mediated astrocytic CREB manipulation and CSDS. Data represented as mean +/- SEM; 751 n = 5 mice per condition. pCREB: phosphorylated CREB; NAc: nucleus accumbens; CSDS: chronic social defeat stress; Res: resilient; Sus: susceptible; Ctrl: control. 752