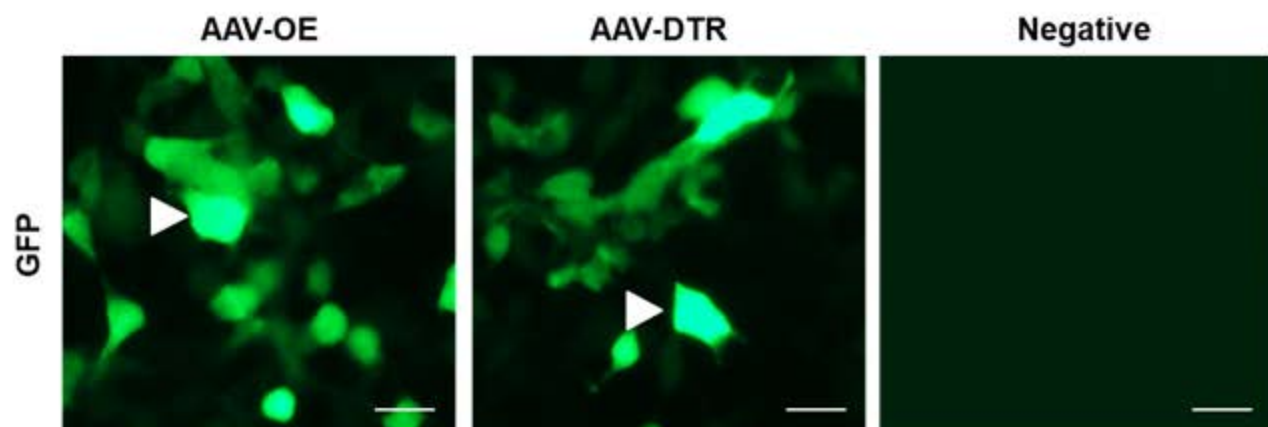
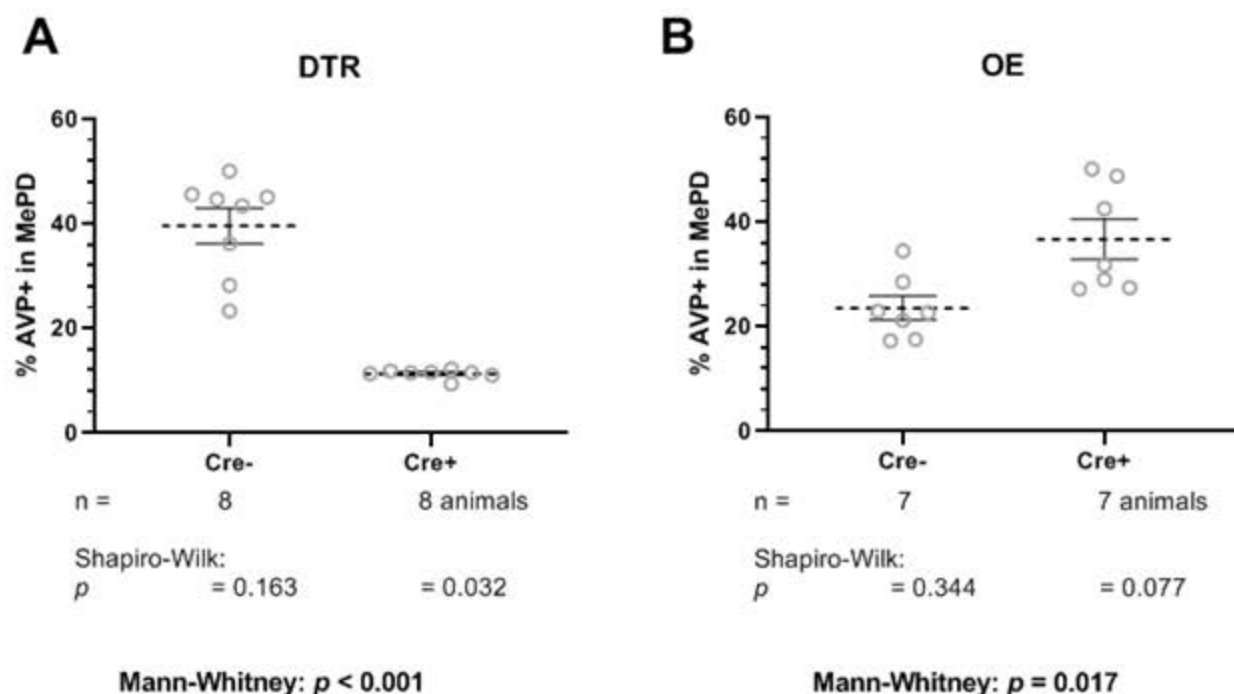


## Supplementary Figure 1



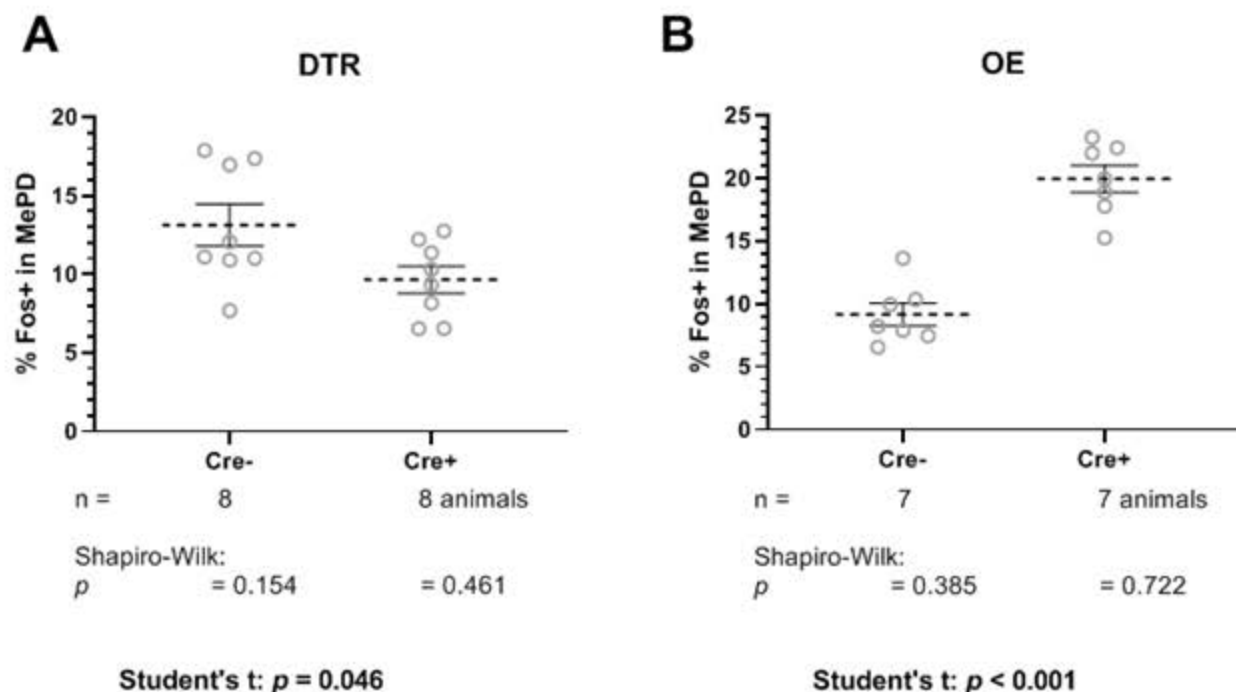
**Supplementary Figure 1.** Transduction of Cre-dependent AAV viral particles into human embryonic kidney 293T cells endogenously expressing Cre recombinase. Expression of GFP reporter was observed seventy two hours after transduction. Scale bar: 20  $\mu$ m.

## Supplementary Figure 2



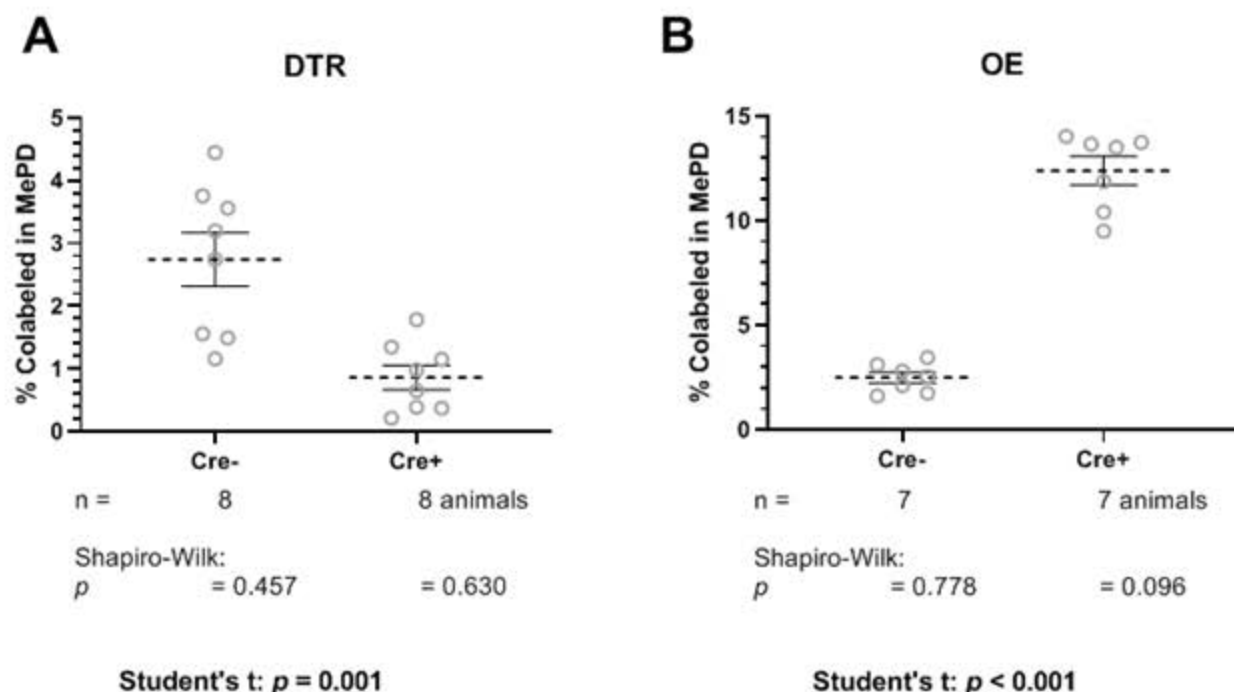
**Supplementary Figure 2.** Effects of experimental manipulations on non-transformed data for arginine vasopressin neurons within the posterodorsal medial amygdala, after partial ablation using diphtheria toxin receptor (DTR, panel A) or overexpression (OE, panel B). The number of arginine vasopressin positive neurons relative to total neurons counted is depicted on the ordinate of panel A and B for non-transformed data. Dot plots in these panels depict median and inter-quartile range along with raw values for all data points ( $n$  underneath the abscissa). Associated  $p$ -values for Shapiro-Wilk tests and probabilities of type 1 error for MePD-AVP+ neurons are also listed. Mann-Whitney non-parametric statistics was used to compare inter-group differences.

### Supplementary Figure 3



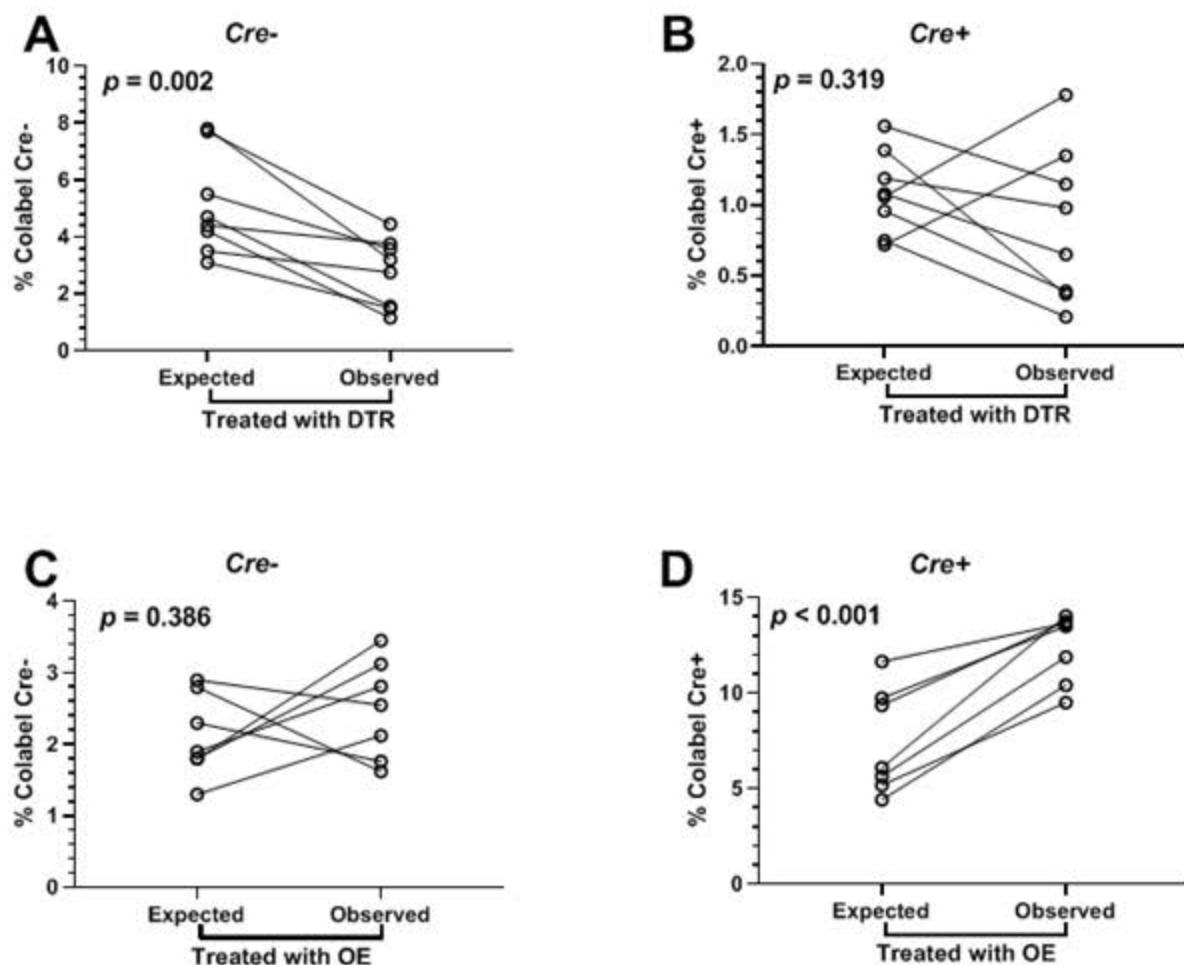
**Supplementary Figure 3.** Effects of experimental manipulations on non-transformed data for posterodorsal medial amygdala neurons showing a marker for recent neuronal activity during cat odor exposure (Fos). Data is presented for partial ablation using diphtheria toxin receptor (DTR, panel A) or overexpression (OE, panel B). The number of Fos positive neurons relative to total neurons counted is depicted on the ordinate of panel A and B for non-transformed data. Dot plots in these panels depict median and inter-quartile range along with raw values for all data points (n underneath the abscissa). Associated p-values for Shapiro-Wilk tests and probabilities of type 1 error for MePD-Fos+ neurons are also listed. Student's t test was used to compare inter-group differences.

## Supplementary Figure 4



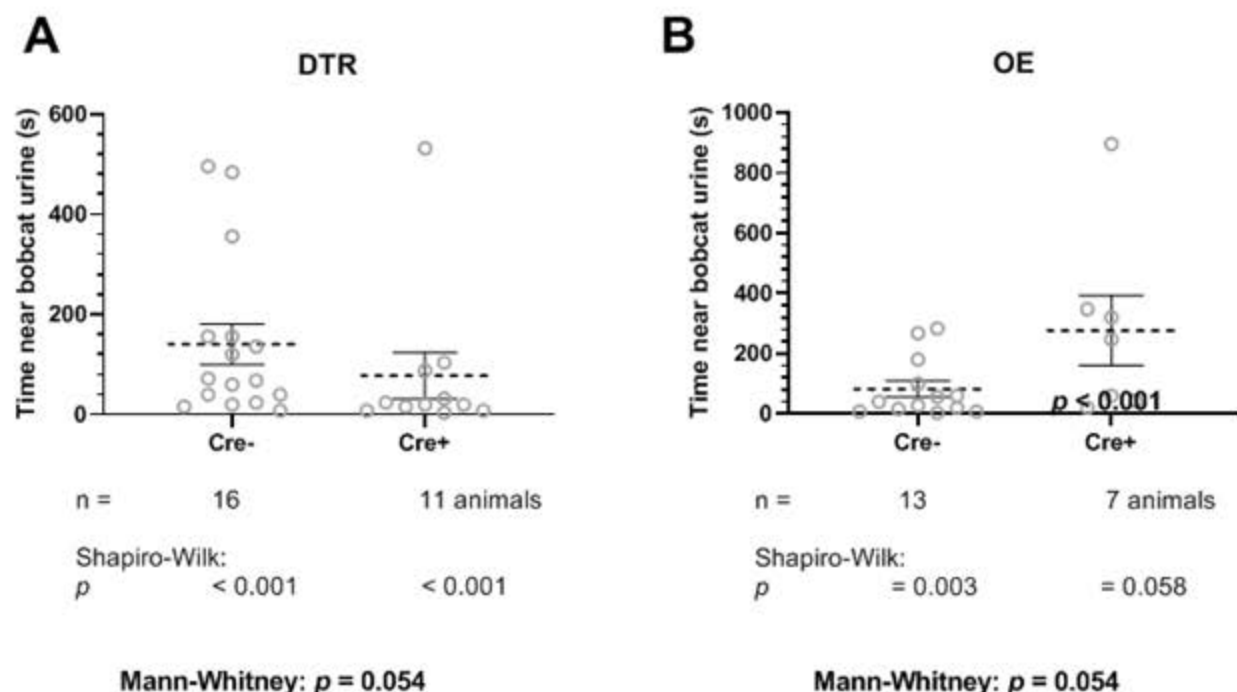
**Supplementary Figure 4.** Effects of experimental manipulations on non-transformed data for posterodorsal medial amygdala neurons colabeled with AVP and Fos in response to cat odor exposure. Data is presented for partial ablation using diphtheria toxin receptor (DTR, panel A) or overexpression (OE, panel B). The number of colabeled neurons relative to total neurons counted is depicted on the ordinate of panel A and B for non-transformed data. Dot plots in these panels depict median and inter-quartile range along with raw values for all data points ( $n$  underneath the abscissa). Associated  $p$ -values for Shapiro-Wilk tests and probabilities of type 1 error for colabeled neurons are also listed. Student's  $t$  test was used to compare inter-group differences.

## Supplementary Figure 5



**Supplementary Figure 5.** Non-transformed stochastic expectation and observed frequency of colabeled neurons across experimental groups for non-transformed data. Data is presented for partial ablation using diphtheria toxin receptor (DTR, panel A and B for animal without or with Cre, respectively) or overexpression (OE, panel C and D for animal without or with Cre, respectively). Expected and observed frequencies for individual animals is depicted using inter-connected lines. Associated p-values for Shapiro-Wilk tests and probabilities of type 1 error for expected and observed frequencies are listed. Parametric statistics was used to compare inter-group differences.

## Supplementary Figure 6



**Supplementary Figure 6.** Effects of experimental manipulations on non-transformed data for the aversion to predator odor. Data is presented for partial ablation using diphtheria toxin receptor (DTR, panel A) or overexpression (OE, panel B). Time spent in the vicinity of bobcat urine is depicted on the ordinate of panel A and B for non-transformed data. Dot plots in these panels depict median and inter-quartile range along with raw values for all data points (n underneath the abscissa). Associated p-values for Shapiro-Wilk tests and probabilities of type 1 error for time spent near predator odor are listed. Mann-Whitney non-parametric statistics was used to compare inter-group differences.